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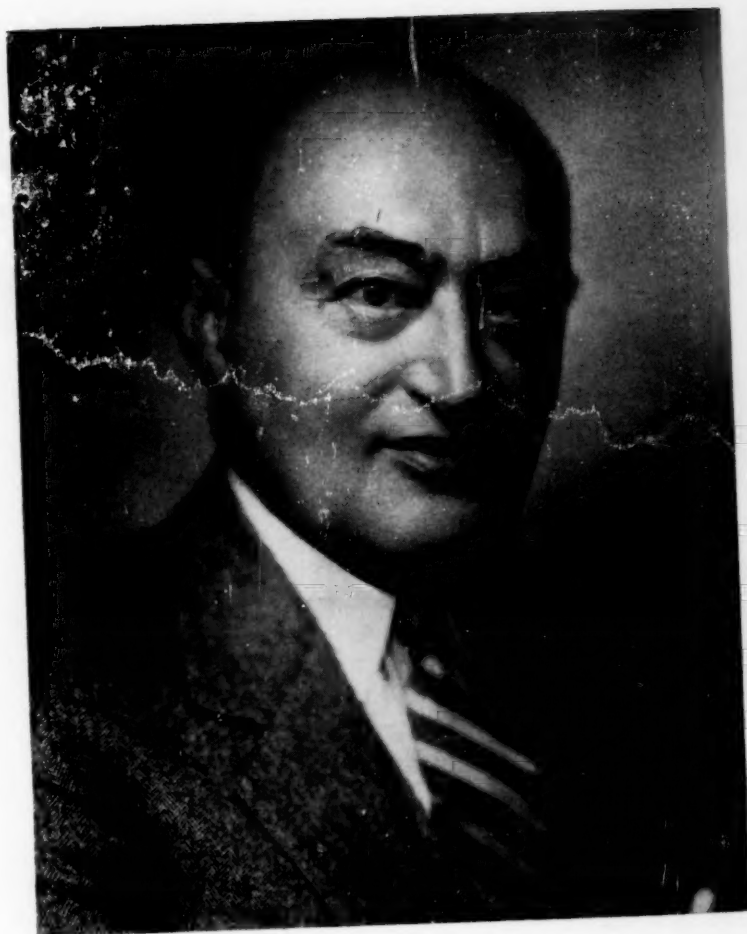
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The American Economic Review

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NUMBER TWO

SCIENCE AND IDEOLOGY*

By JOSEPH A. SCHUMPETER

I

A hundred years ago economists were much more pleased with their performance than they are today. But I submit that, if complacency can ever be justified, there is much more reason for being complacent today than there was then or even a quarter of a century ago. As regards command of facts, both statistical and historical, this is so obviously true that I need not insist. And if it be true of our command of facts, it must be true also for all the applied fields that for their advance mainly depend upon fact finding. I must insist, however, on the proposition that our powers of analysis have grown in step with our stock of facts. A new organon of statistical methods has emerged, to some extent by our own efforts, that is bound to mean as much to us as it does to all the sciences, such as biology or experimental psychology, the phenomena of which are given in terms of frequency distributions. In response to this development and in alliance with it, as well as independently, our own box of analytic tools has been greatly enriched: economic theory, in the instrumental sense of the term—in which it means neither the teaching of ultimate ends of policy nor explanatory hypotheses but simply the sum total of our methods of handling facts—has grown quite as much as Marshall and Pareto had foreseen that it would.

If this is not more generally recognized and if it is etiquette with economists—let alone the public—to pass derogatory judgment on the state of our science, this is owing to a number of causes that, though known all too well, should be repeated: a building plot on which old structures are being torn down and new ones erected is not an esthetic thing to behold; moreover, to a most discouraging extent the new structures are being currently discredited by premature attempts at utilitarian application; finally, the building area widens so

* Presidential address delivered at the Sixty-first Annual Meeting of the American Economic Association, Cleveland, Ohio, December 28, 1948.

that it becomes impossible for the individual worker to understand everything that is going on beyond his own small sector. It would indeed be difficult to present in systematic form, as the Smiths, Mills, and Marshalls have been able to do with more or less success, a comprehensive treatise that might display some measure of unity and command all but universal approval. Thus, though the workers in each sector are not at all displeased with how they are getting on themselves, they are quite likely to disapprove of the manner in which those in all the others go about their tasks, or even to deny that these other tasks are worth bothering about at all. This is but natural. Many types of mind are needed to build up the structure of human knowledge, types which never quite understand one another. Science is technique and the more it develops, the more completely does it pass out of the range of comprehension not only of the public but, minus his own chosen specialty, of the research worker himself. More or less, this is so everywhere although greater uniformity of training and greater discipline of endeavor may in physics reduce the tumult to something like order. As everyone knows, however, there is with us another source of confusion and another barrier to advance: most of us, not content with their scientific task, yield to the call of public duty and to their desire to serve their country and their age, and in doing so bring into their work their individual schemes of values and all their policies and politics—the whole of their moral personalities up to their spiritual ambitions.

I am not going to reopen the old discussion on value judgments or about the advocacy of group interests. On the contrary, it is essential for my purpose to emphasize that *in itself* scientific performance does not require us to divest ourselves of our value judgments or to renounce the calling of an advocate of some particular interest. To investigate facts or to develop tools for doing so is one thing; to evaluate them from some moral or cultural standpoint is, *in logic*, another thing, and the two *need not conflict*. Similarly, the advocate of some interest may yet do honest analytic work, and the motive of proving a point for the interest to which he owes allegiance does not in itself prove anything for or against this analytic work: more bluntly, advocacy does not imply lying. It spells indeed misconduct to bend either facts or inferences from facts in order to make them serve either an ideal or an interest. But such misconduct is not necessarily inherent in a worker's arguing from "axiological premises" or in advocacy *per se*.¹ Examples abound in which economists have estab-

¹ The above passage should be clear. But it may be as well to make its meaning more explicit. The misconduct in question consists, as stated, in "bending facts or logic in order to gain a point for either an ideal or an interest" *irrespective of whether a writer*

lished propositions for the implications of which they did not have any sympathy. To mention a single instance: to establish the logical consistency of the conditions (equations) that are descriptive of a socialist economy will seem to most people equivalent to gaining a point for socialism; but it was established by Enrico Barone, a man who, whatever else he may have been, was certainly no sympathizer with socialist ideals or groups.

But there exist in our minds preconceptions about the economic process that are much more dangerous to the cumulative growth of our knowledge and the scientific character of our analytic endeavors because they seem beyond our control in a sense in which value judgments and special pleadings are not. Though mostly allied with these, they deserve to be separated from them and to be discussed independently. We shall call them Ideologies.

II

The word *idéologie* was current in France toward the end of the 18th and in the first decade of the 19th century and meant much the same thing as did the Scottish moral philosophy of the same and an earlier time or as our own social science in that widest acceptance of the term in which it includes psychology. Napoleon imparted a derogatory meaning to it by his sneers at the *idéologues*—doctrinaire dreamers without any sense for the realities of politics. Later on, it was used as it is often used today in order to denote systems of ideas, that is, in a way in which our distinction between ideologies and value judgments is lost. We have nothing to do with these or any other meanings except one that may be most readily introduced by reference to the "historical materialism" of Marx and Engels. According to this doctrine, history is determined by the autonomous evolution of the structure of production: the social and political organization, religions, morals, arts and sciences are mere "ideological superstructures," generated by the economic process.

We neither need nor can go into the merits and demerits of this conception as such² of which only one feature is relevant to our purpose. This feature is the one that has, through various transformations, developed into the sociology of science of the type associated with the

state his preference for the cause for which he argues or not. Independently of this, it may be sound practice to require that everybody should explicitly state his "axiological premises" or the interest for which he means to argue whenever they are not obvious. But this is an additional requirement that should not be confused with ours.

² In particular, its acceptance is no prerequisite of the validity of the argument that is to follow and could have been set forth also in other ways. There are, however, some advantages in starting from a doctrine that is familiar to all and that needs only to be mentioned in order to call up, in the mind of the audience, certain essential notions in a minimum of time.

names of Max Scheler and Karl Mannheim. Roughly up to the middle of the 19th century the evolution of "science" had been looked upon as a purely intellectual process—as a sequence of explorations of the empirically given universe or, as we may also put it, as a process of filiation of discoveries or analytic ideas that went on, though no doubt influencing social history and being influenced by it in many ways, according to a law of its own. Marx was the first to turn this relation of interdependence between "science" and other departments of social history into a relation of dependence of the former on the objective data of the social structure and in particular on the social location of scientific workers that determines their outlook upon reality and hence what they see of it and how they see it. This kind of relativism—which must of course not be confused with any other kind of relativism³—if rigorously carried to its logical consequences spells a new philosophy of science and a new definition of scientific truth. Even for mathematics and logic and still more for physics, the scientific worker's choice of problems and of approaches to them, hence the pattern of an epoch's scientific thought, becomes socially conditioned—which is precisely what we mean when speaking of scientific ideology rather than of the ever more perfect perception of objective scientific truths.

Few will deny, however, that in the cases of logic, mathematics, and physics the influence of ideological bias does not extend beyond that choice of problems and approaches, that is to say, that the sociological interpretation does not, at least for the last two or three centuries, challenge the "objective truth" of the findings. This "objective truth" may be, and currently is being, challenged on other grounds but not on the ground that a given proposition is true only with reference to the social location of the men who formulated it. To some extent at least, this favorable situation may be accounted for by the fact that logic, mathematics, physics and so on deal with experience that is largely invariant to the observer's social location and practically invariant to historical change: for capitalist and proletarian, a falling stone looks alike. The social sciences do not share this advantage. It is possible, or so it seems, to challenge their findings not only on all the grounds on which the propositions of all sciences may be challenged but also on the additional one that they cannot convey more than a writer's class affiliations and that, without reference to such class affiliations, there is no room for the categories of true or false, hence for the conception of "scientific advance" at all. Henceforth we adopt

³ I should consider it an insult to the intelligence of my reader: to emphasize that in particular this kind of relativism has nothing to do with Einsteinian relativity were it not a fact that there actually are instances of this confusion in the philosophical literature of our time. This has been pointed out to me by Professor Philipp Frank.

the term Ideology or Ideological Bias for this—real or supposed—state of things alone, and our problem is to ascertain the extent to which ideological bias is or has been a factor in the development of what—conceivably—it might be a misnomer to call scientific economics.

In recognizing the ideological element it is possible to go to very different lengths. There are a few writers who have in fact denied that there is such a thing in economics as accumulation of a stock of "correctly" observed facts and "true" propositions. But equally small is the minority who would deny the influence of ideological bias entirely. The majority of economists stand between these extremes: they are ready enough to admit its presence though, like Marx, they find it only in others and never in themselves; but they do not admit that it is an inescapable curse and that it vitiates economics to its core. It is precisely this intermediate position that raises our problem. *For ideologies are not simply lies*; they are truthful statements about what a man thinks he sees. Just as the medieval knight saw himself as he wished to see himself and just as the modern bureaucrat does the same and just as both failed and fail to see whatever may be adduced against their seeing themselves as the defenders of the weak and innocent and the sponsors of the Common Good, so every other social group develops a protective ideology which is nothing if not sincere. *Ex hypothesi* we are not aware of our rationalizations—how then is it possible to recognize and to guard against them?

But let me repeat before I go on: I am speaking of science which is technique that turns out the results which, together with value judgments or preferences, produce recommendations, either individual ones or systems of them—such as the systems of mercantilism, liberalism and so on. I am not speaking of these value judgments and these recommendations themselves. I fully agree with those who maintain that judgments about ultimate values—about the Common Good, for instance—are beyond the scientist's range except as objects of historical study, that they are ideologies by nature and that the concept of scientific progress can be applied to them only so far as the means may be perfected that are to implement them. I share the conviction that there is no sense in saying that the world of ideas of bourgeois liberalism is "superior" in any relevant sense to the world of ideas of the middle ages, or the world of ideas of socialism to that of bourgeois liberalism. Actually, I further believe that there is no reason other than personal preference for saying that more wisdom or knowledge goes into our policies than went into those of the Tudors or Stuarts or, for that matter, into Charlemagne's.

III

So soon as we have realized the possibility of ideological bias, it is not difficult to locate it. All we have to do for this purpose is to scrutinize scientific procedure. It starts from the perception of a set of related phenomena which we wish to analyze and ends up—for the time being—with a scientific model in which these phenomena are conceptualized and the relations between them explicitly formulated, either as assumptions or as propositions (theorems). This primitive way of putting it may not satisfy the logician but it is all we need for our hunt for ideological bias. Two things should be observed.

First, that perception of a set of related phenomena is a pre-scientific act. It must be performed in order to give to our minds something to do scientific work on—to indicate an object of research—but it is not scientific in itself. But though prescientific, it is not preanalytic. It does not simply consist in perceiving facts by one or more of our senses. These facts must be recognized as having some meaning or relevance that justifies our interest in them and they must be recognized as related—so that we might separate them from others—which involves some analytic work by our fancy or common sense. This mixture of perceptions and prescientific analysis we shall call the research worker's Vision or Intuition. In practice, of course, we hardly ever start from scratch so that the prescientific act of vision is not entirely our own. We start from the work of our predecessors or contemporaries or else from the ideas that float around us in the public mind. In this case our vision will also contain at least some of the results of previous scientific analysis. However, this compound is still given to us and exists before we start scientific work ourselves.

Second, if I have identified with "model building" the scientific analysis that operates upon the material proffered by the vision, I must add at once that I intend to give the term "model" a very wide meaning. The explicit economic model of our own day and its analogs in other sciences are of course the product of late stages of scientific endeavor. Essentially, however, they do not do anything that is not present in the earliest forms of analytic endeavor which may therefore also be said to have issued, with every individual worker, in primitive, fragmentary, and inefficient models. This work consists in picking out certain facts rather than others, in pinning them down by labeling them, in accumulating further facts in order not only to supplement but in part also to replace those originally fastened upon, in formulating and improving the relations perceived—briefly, in "factual" and "theoretical" research that go on in an endless chain of give and take, the facts suggesting new analytic instruments (theories) and these in turn carrying us toward the recognition of new facts. This is as

true when the object of our interest is an historical report as it is when the object of our interest is to "rationalize" the Schrödinger equation though in any particular instance the task of fact finding or the task of analyzing may so dominate the other as to almost remove it from sight. Schoolmasters may try to make this clearer to their pupils by talking about induction and deduction and even set the one against the other, creating spurious problems thereby. The essential thing, however we may choose to interpret it, is the "endless give and take" between the clear concept and the cogent conclusion on the one hand, and the new fact and the handling of its variability on the other.

Now, so soon as we have performed the miracle of knowing what we cannot know, namely the existence of the ideological bias in ourselves and others, we can trace it to a simple source. This source is in the initial vision of the phenomena we propose to subject to scientific treatment. For this treatment itself is under objective control in the sense that it is always possible to establish whether a given statement, in reference to a given state of knowledge, is provable, refutable, or neither. Of course this does not exclude honest error or dishonest faking. It does not exclude delusions of a wide variety of types. But it does permit the exclusion of that particular kind of delusion which we call ideology because the test involved is indifferent to any ideology. The original vision, on the other hand, is under no such control. There, the elements that will meet the tests of analysis are, by definition, undistinguishable from those that will not or—as we may also put it since we admit that ideologies *may* contain provable truth up to 100 per cent—the original vision *is* ideology by nature and may contain any amount of delusions traceable to a man's social location, to the manner in which he wants to see himself or his class or group and the opponents of his own class or group. This should be extended even to peculiarities of his outlook that are related to his personal tastes and conditions and have no group connotation—there is even an ideology of the mathematical mind as well as an ideology of the mind that is allergic to mathematics.

It may be useful to reformulate our problem before we discuss examples. Since the source of ideology is our pre- and extrascientific vision of the economic process and of what is—causally or teleologically—important in it and since normally this vision is then subjected to scientific treatment, it is being either verified or destroyed by analysis and in either case should vanish *qua* ideology. How far, then, does it fail to disappear as it should? How far does it hold its own in the face of accumulating adverse evidence? And how far does it vitiate our analytic procedure itself so that, in the result, we are still left with knowledge that is impaired by it?

From the outset it is clear that there is a vast expanse of ground on which there should be as little danger of ideological vitiation as there is in physics. A time series of gross investment in manufacturing industry may be good or bad, but whether it is the one or the other is, normally, open to anyone to find out. The Walrasian system *as it stands* may or may not admit of a unique set of solutions but whether it does or not is a matter of exact proof that every qualified person can repeat. Questions like these may not be the most fascinating or practically most urgent ones but they constitute the bulk of what is specifically scientific in our work. And they are in logic although not always in fact neutral to ideology. Moreover, their sphere widens as our understanding of analytic work improves. Time was when economists thought that they were gaining or losing a point for labor if they fought for the labor-quantity and against the marginal-utility theory of value. It can be shown that, so far as ideologically relevant issues are concerned, this makes as little difference as did the replacement of the latter by the indifference-curve approach or the replacement of the indifference curves by a simple consistency postulate (Samuelson). I dare say that there are still some who find something incongruous to their vision in marginal-productivity analysis. Yet it can be shown that the latter's purely formal apparatus is compatible with any vision of economic reality that anyone ever had.⁴

IV

Let us now look for ideological elements in three of the most influential structures of economic thought, the works of Adam Smith, of Marx, and of Keynes.

In Adam Smith's case the interesting thing is not indeed the absence but the harmlessness of ideological bias. I am not referring to his time- and country-bound practical wisdom about *laissez-faire*, free trade, colonies and the like for—it cannot be repeated too often—a man's political preferences and recommendations as such are entirely beyond the range of my remarks or rather they enter this range only so far as the factual and theoretical analysis does that is presented in support of them. I am exclusively referring to this analytical work

⁴ The contrary opinion that is sometimes met with is to be attributed to the simplified versions of the marginal-productivity theory that survive in textbooks and do not take into account all the restrictions to which production functions are subject in real life, especially if they are production functions of going concerns for which a number of technological data are, for the time being, unalterably fixed—just as in elementary mechanics no account is taken of the complications that arise so soon as we drop the simplifying assumption that the masses of bodies are concentrated in a single point. But a marginal-productivity theory that does take account of restrictions which, even in pure competition, prevent factors from being paid according to their marginal productivities is still marginal-productivity theory.

itself—only to his indicatives, not to his imperatives. This being understood, the first question that arises is what kind of ideology we are to attribute to him. Proceeding on the Marxist principle we shall look to his social location, that is, to his personal and ancestral class affiliations and in addition to the class connotation of the influences that may have formed or may have helped to form what we have called his vision. He was a *homo academicus* who became a civil servant. His people were more or less of a similar type: his family, not penniless but neither wealthy, kept up some standard of education and fell in with a well-known group in the Scotland of his day. Above all it did *not* belong to the business class. His general outlook on things social and economic reproduced these data to perfection. He beheld the economic process of his time with a cold critical eye and instinctively looked for mechanical rather than personal factors of explanation—such as division of labor. His attitude to the land-owning and to the capitalist classes was the attitude of the observer from outside and he made it pretty clear that he considered the landlord (the “slothful” landlord who reaps where he has not sown) as an unnecessary, and the capitalist (who hires “industrious people” and provides them with subsistence, raw materials, and tools) as a necessary evil. The latter necessity was rooted in the virtue of parsimony, eulogy of which evidently came from the bottom of his Scottish soul. Apart from this, his sympathies went wholly to the laborer who “clothes everybody and himself goes in rags.” Add to this the disgust he felt—like all the people in his group—at the inefficiency of the English bureaucracy and at the corruption of the politicians and you have practically all of his ideological vision. While I cannot stay to show how much this explains of the picture he drew, I must emphasize that the other component of this vision, the natural-law philosophy that he imbibed in his formative years, the product of similarly conditioned men, influenced the ideological background from which he wrote in a similar manner—natural freedom of action, the workman’s natural right to the whole product of industry, individualistic rationalism and so on, all this was taught to him ere his critical faculties were developed but there was hardly need to teach him these things for they came “naturally” to him in the air he breathed. But—and this is the really interesting point—all this ideology, however strongly held, really did not much harm to his scientific achievement. Unless we go to him for economic sociology,⁵ we receive from him sound factual and analytic teaching that no doubt carries date but is not open to objection on the score of ideological bias. There is some semiphilosophical foliage of

⁵ Even there, so I have been reminded by Professor E. Hamilton, there is perhaps more to praise than there is to blame.

an ideological nature but it can be removed without injury to his scientific argument. The analysis that supports his qualified free-trade conclusions is not—as it was with some contemporaneous philosophers, such as Morellet—based upon the proposition that by nature a man is free to buy or to sell where he pleases. The statement that the (whole) produce is the natural compensation of labor occurs, but no analytic use is made of it—everywhere the ideology spends itself in phraseology and for the rest recedes before scientific research. In part at least, this was the merit of the man: he was nothing if not responsible; and his sober and perhaps somewhat dry common sense gave him respect for facts and logic. In part it was good fortune: it matters little if his analysis has to be given up as the *psychology* it was meant to be if at the same time it must be retained as a *logical* schema of economic behavior—on closer acquaintance, the *homo economicus* (so far as Adam Smith, the author of the *Moral Sentiments*, can in fact be credited or debited with this conception at all) turns out to be a very harmless man of straw.

Marx was the economist who discovered ideology for us and who understood its nature. Fifty years before Freud, this was a performance of the first order. But, strange to relate, he was entirely blind to its dangers so far as he himself was concerned. Only other people, the bourgeois economists and the utopian socialists, were victims of ideology. At the same time, the ideological character of his premises and the ideological bias of his argument are everywhere obvious. Even some of his followers (Mehring, for instance) recognized this. And it is not difficult to describe his ideology. He was a bourgeois radical who had broken away from bourgeois radicalism. He was formed by German philosophy and did not feel himself to be a professional economist until the end of the 1840's. But by that time, that is to say, *before* his serious analytic work had begun, his vision of the capitalist process had become set and his scientific work was to implement, not to correct it. It was not original with him. It pervaded the radical circles of Paris and may be traced back to a number of 18th century writers, such as Linguet.⁶ History conceived as the struggle between classes that are defined as *haves* and *havenots*, with exploitation of the one by the other, ever increasing wealth among ever fewer *haves* and ever increasing misery and degradation among the *havenots*, moving with inexorable necessity toward spectacular explosion, this was the vision then conceived with passionate energy and to be worked up, like a raw material is being worked up, by means of the scientific tools of his time. This vision implies a number of statements that will

⁶ See especially S. N. H. Linguet, *La théorie des Lois Civiles* (1767), and Marx's comments on him in Volume I, pp. 77 *et seq.* of the *Theorien über den Mehrwert*.

not stand the test of analytic controls. And, in fact, as his analytic work matured, Marx not only elaborated many pieces of scientific analysis that were neutral to that vision but also some that did not agree with it well—for instance, he got over the kind of underconsumption and the kind of overproduction theories of crises which he seems to have accepted at first and traces of which—to puzzle interpreters—remained in his writings throughout. Other results of his analysis he introduced by means of the device of retaining the original—ideological—statement as an “absolute” (*i.e.*, abstract) law while admitting the existence of counteracting forces which accounted for deviating phenomena in real life. Some parts of the vision, finally, took refuge in vituperative phraseology that does not affect the scientific elements in an argument. For instance, whether right or wrong, his exploitation theory of “surplus” value was a genuine piece of theoretical analysis. But all the glowing phrases about exploitation could have been attached just as well to other theories, Böhm-Bawerk’s among them: imagine Böhm-Bawerk in Marx’s skin, what could have been easier for him than to pour out the vials of his wrath on the infernal practice of robbing labor by means of deducting from its product a time discount?

But some elements of his original vision—in particular the increasing misery of the masses which was what was to goad them into the final revolution—that were untenable were at the same time indispensable for him. They were too closely linked to the innermost meaning of his message, too deeply rooted in the very meaning of his life, to be ever discarded. Moreover, they were what appealed to followers and what called forth their fervent allegiance. It was they which explain the organizing effect—the party-creating effect—of what without them would have been stale and lifeless. And so we behold in this case the victory of ideology over analysis: all the consequences of a vision that turns into a social creed and thereby renders analysis sterile.

Keynes’ vision—the source of all that has been and is more or less definitely identified as Keynesianism—appeared first in a few thoughtful paragraphs in the introduction to the *Consequences of the Peace* (1920). These paragraphs created *modern* stagnationism—stagnationist moods had been voiced, at intervals, by many economists before, from *Britannia Languens* on (1680)—and indicate its essential features, the features of mature and arteriosclerotic capitalist society that tries to save more than its declining opportunities for investment can absorb. This vision never vanished again—we get another glimpse of it in the tract on *Monetary Reform* and elsewhere but, other problems absorbing Keynes’ attention during the 1920’s, it was not implemented analytically until much later. D. H. Robertson in his *Banking Policy*

and the *Price Level* presented some work that amounted to partial implementation of the idea of abortive saving. But with Keynes this idea remained a side issue even in the *Treatise on Money*. Perhaps it was the shock imparted by the world crisis which definitely broke the bonds that prevented him from fully verbalizing himself. Certainly it was the shock imparted by the world crisis which created the public for a message of this kind.

Again it was the ideology—the vision of decaying capitalism that located (*saw*) the cause of the decay in one out of a large number of features of latter-day society—which appealed and won the day, and not the analytic implementation by the book of 1936 which, by itself and without the protection it found in the wide appeal of the ideology, would have suffered much more from the criticisms that were directed against it almost at once. Still, the conceptual apparatus was the work not only of a brilliant but also of a mature mind—of a Marshallian who was one of the three men who had shared the sage's mantle between them. Throughout the 1920's Keynes was and felt himself to be a Marshallian and even though he later on renounced his allegiance dramatically, he never deviated from the Marshallian line more than was strictly necessary in order to make his point. He continued to be what he had become by 1914, a master of the theorist's craft, and he was thus able to provide his vision with an armour that prevented many of his followers from seeing the ideological element at all. Of course this now expedites the absorption of Keynes' contribution into the current stream of analytic work. There are no really new principles to absorb. The ideology of underemployment equilibrium and of non-spending—which is a better term to use than saving—is readily seen to be embodied in a few restrictive assumptions that emphasize certain (real or supposed) facts. With these everyone can deal as he thinks fit and for the rest he can continue his way. This reduces Keynesian controversies to the level of technical science. Lacking institutional support, the "creed" has petered out with the situation that had made it convincing. Even the most stalwart McCullochs of our day are bound to drift into one of those positions of which it is hard to say whether they involve renunciation, reinterpretation, or misunderstanding of the original message.

V

Our examples might suggest that analytically uncontrolled ideas play their role exclusively in the realm of those broad conceptions of the economic process as a whole that constitute the background from which analytic effort sets out and of which we never succeed in fully mastering more than segments. This is of course true to some extent—

the bulk of our research work deals with particulars that give less scope to mere vision and are more strictly controlled by objective tests—but not wholly so. Take, for instance, the theory of saving which does appear in a wider context in the Keynesian system but might also, factually and theoretically, be treated by itself. From the time of Turgot and Smith—in fact from still earlier times—to the time of Keynes all the major propositions about its nature and effects have, by slow accretion, been assembled so that, in the light of the richer supply of facts we command today, there should be little room left for difference of opinion. It should be easy to draw up a summarizing (though perhaps not very exciting) analysis that the large majority of professional economists might accept as a matter of course. But there is, and always has been, eulogistic or vituperative preaching on the subject that, assisted by terminological tricks such as the confusion between saving and nonspending, has succeeded in producing a sham antagonism between the writers on the subject. Much emphasized differences in doctrine for which there is no factual or analytical basis always indicate, though in themselves they do not prove, the presence of ideological bias on one side or on both—which in this case hails from two different attitudes to the bourgeois scheme of life.

Another instance of sectional ideology of this kind is afforded by the attitude of many, if not most economists, toward anything in any way connected with monopoly (oligopoly) and cooperative price setting (collusion). This attitude has not changed since Aristotle and Molina although it has acquired a partially new meaning under the conditions of modern industry. Now as then, a majority of economists would subscribe to Molina's dictum: *monopolium est injustum et rei publicae injuriosum*. But it is not this value judgment which is relevant to my argument—one may dislike modern largest-scale business exactly as one may dislike many other features of modern civilization—but the analysis that leads up to it and the ideological influence that this analysis displays. Anyone who has read Marshall's *Principles*, still more anyone who has also read his *Industry and Trade*, should know that among the innumerable patterns that are covered by those terms there are many of which benefit and not injury to economic efficiency and the consumers' interest ought to be predicated. More modern analysis permits to show still more clearly that no sweeping or unqualified statement can be true for all of them; and that the mere facts of size, single-sellership, discrimination, and cooperative price setting are in themselves inadequate for asserting that the resulting performance is, in any relevant sense of the word, inferior to the one which could be expected under pure competition in conditions attainable under pure competition—in other words, that economic

analysis offers no material in support of *indiscriminate* "trust busting" and that such material must be looked for in the particular circumstances of each individual case. Nevertheless, many economists support such *indiscriminate* "trust busting" and the interesting point is that enthusiastic sponsors of the private-enterprise system are particularly prominent among them. Theirs is the ideology of a capitalist economy that would fill its social functions admirably by virtue of the magic wand of pure competition were it not for the monster of monopoly or oligopoly that casts a shadow on an otherwise bright scene. No argument avails about the performance of largest-scale business, about the inevitability of its emergence, about the social costs involved in destroying existing structures, about the futility of the hallowed ideal of pure competition—or in fact ever elicits any response other than most obviously sincere indignation.

Even as thus extended, our examples, while illustrating well enough what ideology is, are quite inadequate to give us an idea of the range of its influence. The influence shows nowhere more strongly than in economic history which displays the traces of ideological premises so clearly, precisely because they are rarely formulated in so many words, hence rarely challenged—the subject of the role that is to be attributed in economic development to the initiative of governments, policies, and politics affords an excellent instance: groupwise, economic historians have systematically over- or understated the importance of this initiative in a manner that points unequivocally to prescientific convictions. Even statistical inference loses the objectivity that should in good logic characterize it whenever ideologically relevant issues are at stake.⁷ And some of the sociological, psychological, anthropological, biological waters that wash our shores are so vitiated by ideological bias that, beholding the state of things in parts of those fields, the economist might sometimes derive solace from comparison. Had we time, we could everywhere observe the same phenomenon: that ideologies crystallize, that they become creeds which for the time being are impervious to argument; that they find defenders whose very souls go into the fight for them.

There is little comfort in postulating, as has been done sometimes, the existence of detached minds that are immune to ideological bias and *ex hypothesi* able to overcome it. Such minds may actually exist

⁷ I am not aware of any instances in which the rules of inference themselves have been ideologically distorted. All the more frequent are instances in which the rigor of tests is relaxed or tightened according to the ideological appeal of the proposition under discussion. Since acceptance or rejection of a given statistical result always involves some risk of being wrong, mere variation in willingness to incur such a risk will suffice, even apart from other reasons, to produce that well-known situation in which two statistical economists draw opposite inferences from the same figures.

and it is in fact easy to see that certain social groups are further removed than are others from those ranges of social life in which ideologies acquire additional vigor in economic or political conflict. But though they may be relatively free from the ideologies of the practitioners, they develop not less distorting ideologies of their own. There is more comfort in the observation that no economic ideology lasts forever and that, with a likelihood that approximates certainty, we eventually grow out of each. This follows not only from the fact that social patterns change and that hence every economic ideology is bound to wither but also from the relation that ideology bears to that prescientific cognitive act which we have called vision. Since this act induces fact finding and analysis and since these tend to destroy whatever will not stand their tests, no economic ideology could survive indefinitely even in a stationary social world. As time wears on and these tests are being perfected, they do their work more quickly and more effectively. But this still leaves us with the result that some ideology will always be with us and so, I feel convinced, it will.

But this is no misfortune. It is pertinent to remember another aspect of the relation between ideology and vision. That prescientific cognitive act which is the source of our ideologies is also the prerequisite of our scientific work. No new departure in any science is possible without it. Through it we acquire new material for our scientific endeavors and something to formulate, to defend, to attack. Our stock of facts and tools grows and rejuvenates itself in the process. And so—though we proceed slowly because of our ideologies, we might not proceed at all without them.

BENTHAM AND J. S. MILL: THE UTILITARIAN BACKGROUND*

By JACOB VINER

The one-hundredth anniversary of the publication of J. S. Mill's *Principles of Political Economy* falls in the year 1948, and the American Economic Association in the programming of its meetings takes advantage of anniversaries of births, deaths, and dates of publication to remind its members that our discipline has a past. This is a proper occasion, therefore, for a paper on J. S. Mill. The inclusion of Bentham in the scope of my paper is of my own contriving, but perhaps I can technically legitimize it by appeal to the fact that British learned circles have been celebrating during 1948 the two-hundredth anniversary of Bentham's birth. There is no intellectual difficulty, however, in associating Bentham with Mill. The intellectual history of Mill is in large part a history, first, of faithful discipleship, then of rebellion from, and finally of substantial return, to the Benthamite set of doctrines.

The general lines of Bentham's thought were wholly of the eighteenth century, as I could demonstrate if there were time. Of English intellectuals who have had great influence, Bentham was perhaps the least original in his stock of general ideas, but clearly the most original in finding means and devices for putting his philosophy to practical use. To the nineteenth century Bentham was important as a carrier of eighteenth century thought and, still more, as a translator of this thought into a program of social reform. It was the seventeenth century which was the Age of Genius. The philosophers of the eighteenth century were, nonetheless, fertile in ideas. They were, however, almost completely devoid of zeal for the application of these ideas to change of institutions, or even of zeal in generating ideas which would call for change in existing institutions.

We economists like to think of Adam Smith as an exception in this regard, but he was so only to a moderate extent. The one social issue on which Adam Smith was a zealot was the issue of freedom of trade *versus* mercantilism. But Smith had little confidence in the ability of ideas to move worlds. It is often overlooked that it was with reference to internal and not to international free trade that Adam

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Smith made his famous statement that "To expect, indeed, that the freedom of trade should ever be entirely restored in Great Britain, is as absurd as to expect that an Oceana or Utopia should ever be established in it," and this although when he wrote, by obsolescence rather than by deliberate repeal, the restrictions on internal freedom of trade had already become largely inoperative. There is no evidence that Smith was more optimistic about the prospects for international than for domestic free trade, or that, beyond writing his book and preparing a few memoranda for the government when called upon, he ever felt moved to do anything, and especially to resort to anything rude or, in the eighteenth-century meaning of the term, to "enthusiasm," to obtain acceptance and execution of his reforming ideas.

The eighteenth century, in Britain if not in France, and before the American and the French Revolutions if not after, was the age of social complacency, political, economic, moral, of satisfaction with the *status quo* at least to the extent of belief that the costs of substantial change would exceed the benefits of removal or moderation of whatever evils were recognized to prevail. British eighteenth-century government was oligarchic, corrupt, inefficient, though it was generally not tyrannical in intent and usually too lax, too inert, too decentralized, and too sceptical to be seriously tyrannical in effect. Until the end of the century there was no major figure who even mildly suggested the need for major political reform. Whether the economic condition of the masses of the people was improving or deteriorating, and whatever its trend, whether it was desperately bad or moderately good as compared to later standards, I frankly have no idea. We may rest assured, however, that it was not idyllic, if only because it never is.

Nevertheless, there was not until the very last moments of the century either a single major political debate which turned on the economic conditions of the poor or a single major writer who had important suggestions as to how to improve them, with the sole exception of Adam Smith's plea for freedom of trade. It was even a common doctrine of the century that the poor should never be relieved of their poverty above the level of a bare subsistence plus perhaps a few crumbs of cake, and it was at least the quasi-official doctrine of the Church of England that the poverty of the poor—and the prosperity of the bishops—were in accordance with the Divine Will.

Bentham and the Benthamites, on the other hand, were never complacent about the condition of the people of England. They were "Radical Reformers," and they worked hard at their reforms: by working out detailed blueprints for them; by propaganda, agitation, intrigue, conspiracy; and, if truth be told, by encouragement to revolutionary movements up to—but not beyond—the point where resort to physical

force would be the next step. Bentham, moreover, was a successful social reformer, more successful perhaps than anyone else in history except Karl Marx—I have in mind here only the realization and not the merits of programs of change—if he is given credit for those changes which came after his death as the result largely of the efforts of his disciples.

The list of reforms in England which derive largely from Bentham is a truly impressive one, and I present it here only in part: fundamental law reform in many of its branches; prison reform; adult popular suffrage, including woman suffrage; free trade; reform in colonial government; legalization of trade unions; general education at public expense; free speech and free press; the secret ballot; a civil service appointed and promoted on merit; repeal of the usury laws; general registration of titles to property; reform of local government; a safety code for merchant shipping; sanitary reform and preventive medicine at public expense; systematic collection of statistics; free justice for the poor. Bentham was the first person to propose birth-control as a measure of economic reform, and this *before* Malthus had published his first *Essay on the Principle of Population*.¹ The Ministry of Health which he proposed would be made responsible not only for general sanitation and routine public health work, but also for smoke prevention, local health-museums, and the policing of the medical profession to prevent their formation of monopolies.

Related to the conditions of the time when these reforms were proposed, Bentham's program was comprehensive, radical, and progressive without being visionary. The modern "democratic socialist" would find it wanting, since Bentham did not approve of tampering with the system of private property except through inheritance taxation and insisted on "compensation" where reform measures would involve violation of "reasonable expectations." He apparently never formulated any concrete proposals for social security on an insurance basis, but he approved in principle of government-administered and government-subsidized insurance against every conceivable type of social hazard for which individual prudence could not make adequate provision. It was too early for proposals to stabilize employment through monetary or fiscal measures, although Bentham did explore the possibility of increasing real investment and production through the "forced frugality" induced by the issue of paper money.² Pronounced in-

¹ See J. Bentham, "Situation and Relief of the Poor," *Annals of Agriculture*, Vol. XXIX (1797), pp. 422-23 (p. 31, in the separate pamphlet version). See also Norman E. Himes, "Jeremy Bentham and the Genesis of English Neo-Malthusianism," *Economic History* (Suppl. of *The Economic Journal*), Vol. III (1936), pp. 267-76.

² Bentham's treatment of this still remains in large part in manuscript. Extracts from these unpublished manuscripts and comments by Ricardo on them have recently been

dividualist though he was, his specific program of reforms in both the content and the processes of legislation, in governmental organization, and in public administration, made him a major source of inspiration for the Fabian socialists as well as for the laissez-faire liberals.

To belief in political democracy Bentham came only slowly, and only as their failure to adopt his proposals eroded his faith in the good intentions of the British aristocratic politicians. The Benthamite case for political democracy was first elaborately expounded by James Mill in his famous essay on Government first published in 1820. It turned out to be an embarrassment for Bentham and his other disciples because by the scholastic formalism of its argument and the extreme lengths to which it carried Bentham's doctrine it was seriously vulnerable to rebuttal and, even worse, to ridicule. Starting out from the proposition that the sole proper purpose of government is to promote the greatest happiness of mankind, James Mill proceeded by purely *a priori* analysis, without any reference to history or to contemporary fact, from the premise that legislators served *only* their "sinister interests"—a stock Benthamite term for the self-interest of rulers or a ruling class—to the conclusion that good government was therefore obtainable only by making it, through popular suffrage and frequent elections, the self-interest of the elected to serve the interests of the electors.

Bentham, writing in the 1780's, had conceded that if at any time legislators "have suffered the nation to be preyed upon by swarms of idle pensioners, or useless place-men, it has rather been from negligence and imbecility, than from any settled plan for oppressing and plundering of the people," but in 1814 he appended a note withdrawing the concession: "So thought Anno 1780 and 1790.—Not so Anno 1814.—J. Bentham."³ By that time he had adopted the doctrine of "Sinister Interests." But James Mill carried the doctrine further than was necessary to meet Bentham's requirements and probably further than Bentham's belief in it. As Tawney has remarked: "To [James Mill] the State is not a band of brothers, but a mutual detective society; the principal advantage of popular government is that there are more detectives, and therefore, presumably, fewer thieves."⁴ Bentham always, but James Mill rarely, if ever, conceded that men, even legislators, could not only be influenced by the praise and blame of other men,

published by Edmund Silberner, "Un Manuscrit Inédit de David Ricardo sur le Problème Monétaire," *Revue d'Histoire Économique et Sociale*, Vol. XXV (1940), 195-259, and were then also already in page proof in Piero Sraffa's long-forthcoming edition of Ricardo's works.

³ Bentham, "Principles of Morals and Legislation," *Works* (Edinburgh, 1838-1843), I. 5.

⁴ R. H. Tawney, preface to *Life and Struggles of William Lovett*, new ed. (New York, 1920), p. xxi.

but could even display some measure of pure benevolence. As Barker has commented: "... while all—or nearly all—of the theorems of Mill's article may be found in Bentham, they have undergone a change. The egoism is more egoistic; the negativism is more negative,"⁵ and it may be added the *a priori* analysis more "high *priori*." In the seventeenth century Harrington had denied that Hobbes could work the miracle of "making you a king by geometry." Macaulay was now to deny that the Benthamites could depose an aristocracy by geometry.

Macaulay, a young man anxiously seeking fame by his fluent and facile pen, found the opportunity in James Mill's essay on Government. Reviewing in 1829, in the magisterial *Edinburgh Review*, a reprint of this essay of James Mill, Macaulay raked it high and low, primarily on the basis of its use, without benefit of historical induction or of reference to contemporary facts, of the *a priori* or, in the language of the time and earlier, the geometrical method, but also on the more concrete ground that the proposition that legislators *always* and *invariably* act in terms of their selfish interests was preposterous whatever the method by which it was attempted to establish it.⁶

The Benthamites were shaken by the attack, and J. S. Mill most so, as we shall see later. But Macaulay himself, without withdrawing anything of what he had written, soon thereafter made his peace with James Mill and from then on was an exponent of political democracy on the basis of a line of argument which Paxton in his *Civil Polity* had already presented in 1703, and which should have been the original and was to become the standard line of the Benthamites, namely, that only by democratic voting could there be an adequate guarantee that legislators would *always* or predominantly serve the general interest, without denial that they might sometimes do so even in the absence of democracy.

I come now to deal more systematically with the most difficult and the most controverted aspect of Benthamism, namely, its psychological and ethical justifications for utilitarianism as legislative policy.

Bentham's main concern with ethics was with the ethics which should be followed by moral leaders, not with the ethics of the ordinary man, not with private morals, except as they were data to be operated on by the elite. "The science," he said, "whose foundations we have explored can appeal only to lofty minds with whom the public welfare has become a passion."⁷ And by them, Bentham held, its lessons should be pressed on legislators, whether *their* minds were lofty ones or not.

⁵ Sir Ernest Barker, in the preface of his edition of James Mill, *Essay on Government* (Cambridge, England, 1937).

⁶ See the preface, pp. ix-xi and pp. 160 ff. of *The Miscellaneous Writings and Speeches of Lord Macaulay*, Popular Edition (London, 1891).

⁷ *Theory of Legislation*, C. M. Atkinson ed. (London, 1914), II. 337.

As Bentham acknowledged,⁸ he sometimes overlooked this, and wrote as if what he had to say was directed at private morals, and critics have made much of this oversight without treating it merely as a lapse from his fundamental purposes. It was Benthamism interpreted as a system of private ethics, didactic as well as descriptive, that has aroused the most violent and the most emotional antagonism. Even as private ethics, however, Benthamism has seemed so vulnerable a target to *odium theologicum* and *odium ethicum* only because the private ethics of the critics permitted them to attack Bentham's words without taking pains to ascertain what the thoughts were which these words were intended to communicate.

Bentham starts from the standard eighteenth-century proposition, common to theologians and to sceptical philosophers alike, that man operates "under the governance of two sovereign masters, pain and pleasure." Happiness is a net sum or aggregate of individually experienced pleasures and pains.⁹ Man, he claims, acts only in response to his "interests," by which he usually, and fundamentally, means whatever men are interested in, but, unfortunately, frequently allows to mean what men regard as in their self-interest. Men normally are interested to some extent in the happiness of others than themselves, and in exceptional cases are capable of "universal benevolence," or a dominating concern with the happiness of mankind at large, but generally, if they are left to themselves, there will be serious discrepancy between the actual behavior of individuals and the behavior which would conduce to "the greatest happiness of the greatest number." It is the function of legislation to coerce or bribe individuals to make their behavior coincide with that required by the greatest-happiness principle, and of education and moral leaders to mould men's desires so that they spontaneously associate the happiness of others with their own happiness.

Bentham nowhere attempts or asserts the possibility of a positive demonstration that greatest happiness, whether as hedonism or as eudaemonism, is the proper moral objective for the common man, the moral leader, or the legislator, and his only argument in support of the greatest-happiness principle is the negative one that the rival principles proposed by other ethical systems are either resolvable upon scrutiny to verbal variants of the utility principle, or are sheer *ipse dixitism*, or are meaningless patterns of words.

⁸ Cf. for example, the preface, first added to the 1823 edition, of his *Introduction to the Principles of Morals and Legislation*, where he says that "an introduction to a penal code" would have been a title better indicating the nature of its contents.

⁹ Cf. "Gamaliel Smith" [=Jeremy Bentham], *Not Paul, but Jesus* (London, 1823), p. 394: "happiness, to be anything, must be composed of pleasures: and, be the man who he may, of what it is that gives pleasure to him, he alone can be judge."

"Pleasure" and "happiness" were to Bentham widely inclusive terms, involving not only the pleasures of the senses but also those of the heart and the mind. Pleasures, moreover, which in their "simple" or primary form, genetically speaking, were pleasures of self could by "association of ideas" become associated with the pleasures of others. Man, by living in society, by education, and by acts of parliament, could be made good. The eighteenth-century utilitarians may have traded, as a German philosopher has put it, "in the small wares of usefulness (*Nutzlichkeitskrämerei*)."¹⁰ Or it may be that to accept the pursuit of pleasure as a proper end of man is "swinish doctrine," if it be proper to assume that man pursues swinish pleasures. But a utilitarian does not have to be a Philistine. If in Bentham's exposition of his psychology there was often undue stress on the selfish sentiments, this fault—which was much more evident in James Mill than in Bentham—was the result of lack of imagination and of feeling, or of faulty observation—itself the consequence of these lacks—rather than any inherent incompatibility of broader views with the logic of his system. One important manifestation of this—systematic on the part of James Mill but only occasional and incidental on the part of Bentham—was the assumption that even when one's own pleasure had through association of ideas become involved in the pleasure of other persons, the affectionate sentiments toward others still contained an element of conscious reference back to one's own pleasures. This, by implication at least, was a proclamation of the universal prevalence of psychological hedonism.¹⁰

The eighteenth century is often termed the "Age of Reason," and it is correctly so termed if by the phrase is meant that it was the age in which philosophers held that the credibility of all things should be tested by reason. But from the point of view of its prevailing psychological doctrines, it could more properly be called the "Age of the Passions" because of its stress on the emotions and the instincts, the affections and aversions, and its playing down of the role of reason in the behavior of the ordinary man. David Hume was writing in the spirit of his times when he declared that: "Reason is and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them." The normal role of reason was that of an obedient servant of the passions, a passive agent for the comparison of their relative intensities and for the justification of the choices made between them. "So convenient a thing," said Bentham in his Autobiography, "it is to be a reasonable creature, since it enables

¹⁰ In notes to his edition of James Mill, *Analysis of the Phenomena of the Human Mind* (London, 1869), J. S. Mill, without fully admitting that his father had held this doctrine, points out passages which could be interpreted as implying it. See II. 217, note; II. 224, note; II. 286 ff. note, etc.

one to find or make a reason for everything one has a mind to do."

For the moral philosopher and the properly conditioned legislator, however, Bentham assigned more important roles to reason, first, that of moulding the passions of individuals so that they would contribute more to the augmentation of general happiness, and second, that of providing a technique for the comparison of passions of individuals with a view to making a socially oriented choice between them where choice had to be or could be made. It was for this social purpose, and not for the routine behavior of routine individuals, that Bentham endeavored to construct what he at different times labelled as a "moral thermometer," a "moral arithmetic," a "felicific calculus."

Much amusement has been derived from Bentham's attempt to develop a technique by which the quantities of pleasure and pain could be measured by the legislator or the benevolent philosopher. Wesley Mitchell's well-known essay on "Bentham's Felicific Calculus,"¹¹ is the fullest and the least unsympathetic account I am acquainted with of Bentham's position on this question. Mitchell points out the excessive degree of hedonism attributed by Bentham to mankind, and comments penetratingly on Bentham's attempt to find a common denominator through money for the pleasures of different persons. Mitchell says that in fact Bentham used the calculus not as an instrument of calculation, but as a basis of ordinal classification. "It pointed out to him what elements should be considered in a given situation, and among these elements *seriatim* he was often able to make comparisons in terms of greater and less—" I think this is a somewhat misleading description of Bentham's method. The "classification" was not *seriatim*, was not in terms of higher and lower, but merely of pro and con, of pleasure and pain, and was wholly preliminary to rather than part of the calculus. The "calculus" as he actually used it was merely a mental comparison of the comparative weights of the pros and cons, a technique which neither calls for fancy labels nor is properly conducive either to merriment or to measurement.

Bentham did not invent the concept or the terminology of "moral arithmetic." Play with the idea of measuring the unmeasurable and resort to the language of measurement where it was silly to attempt to apply it goes back to at least the seventeenth century, when the prestige of geometry and later of algebra tended to trap all philosophers with scientific pretensions into casting their analysis into pseudo-mathematical form. Mandeville, as early as 1730, laughed at physicians who studied mathematics because it was fashionable, and cited one who had advised that for certain diseases "the doses of the medicines

¹¹ Reprinted in W. C. Mitchell, *The Backward Art of Spending Money* (New York, 1937), pp. 177-202.

are to be as the Squares of the Constitutions."¹² Thomas Reid, in his *Essay on Quantity* of 1748, questioned the possibility of reducing to measurement such things as sensations, beauty, pleasure, and the affections and appetites of the mind, even though they "are capable of more and less," and he warned that to apply mathematical language to non-measurable things "is to make a show of mathematical reasoning, without advancing one step in real knowledge."¹³

Bentham never went far afield for the sources of his ideas, and I suspect that Benjamin Franklin was his source, direct or indirect, for this idea of classification by "bipartition" plus "measurement" of the relative weight of the two classes. Franklin a few years earlier, in 1772, had been expounding it in private correspondence with Joseph Priestley and Richard Price—with all three of whom Bentham had personal contacts—in very much the same terms as Bentham was later to use, and under the similar, and already old, label of "moral or prudential algebra."¹⁴

None of Bentham's immediate disciples showed any interest in this aspect of Bentham's thought, and it was not until Jevons drew attention to it and made it the basis of his subjective theory of economic value that it had any influence, for good or bad. I like to think, more so probably than Wesley Mitchell would have appreciated, that Bentham's felicific calculus was merely one more manifestation of the inferiority complex which practitioners of the social "sciences" had in the eighteenth century, and have reacquired in the twentieth, towards mathematics, towards the exact sciences, and towards quantification as one of the higher virtues. Since with the application of "political arithmetic" to "moral arithmetic" we now all accept without protest the derivation of measured "propensities" from correlations between psychologically and otherwise promiscuous statistical aggregates compiled catch-as-catch-can on anything up to global scale, our readiness to laugh at Bentham's modest and wholly platonic gestures in this direction excites my propensity for amazement.

There remains one question, specially important for economics, where the influence of Bentham on J. S. Mill is obvious, the question of laissez-faire, or the economic role of government. Élie Halévy, in his great but tendentious work on the Benthamites,¹⁵ has made much of the existence in Bentham's system of a conflict between his juristic and

¹² Bernard Mandeville, M.D., *A Treatise of the Hypochondriack and Hysterick Diseases*, 2nd ed. (London, 1730), p. 184. Compare the history of "Lullism."

¹³ *The Works of Thomas Reid*, Sir William Hamilton, ed., 3rd ed. (Edinburgh, 1852), p. 717.

¹⁴ *The Monthly Repository*, Vol. XII (1817), p. 13, and *Proceedings of the Massachusetts Historical Society*, 2nd ser., Vol. XVII (1903), p. 264.

¹⁵ *La Formation du Radicalisme Philosophique*, 3 vols. (Paris, 1901-1904). There is an inferior edition in English in one volume.

his economic doctrines. According to Halèvy, Bentham in his juristic theory makes it the primary function of government to create an *artificial* harmony between the interests of individuals and the public interest, whereas in his economic theory he reaches laissez-faire conclusions on the basis of an implied natural or spontaneous harmony of interests. This has become a stereotype of present-day comments on Bentham, and although there may be exceptions to the natural law which proclaims that stereotypes in the field of the history of ideas provide a light which blinds rather than guides, this is not one of them.

Bentham did interpret the function of government, under the influence largely of Helvétius, as that of creating, through the application of rewards and punishments, an approach to harmony between the interests of individuals and the social interests. He did prescribe limits for the field for governmental intervention in economic matters, but these limits were not, as we shall see, very narrow ones, and in any case were not so narrow as to give scope for a doctrine of natural harmony of interests, in the sense of a harmony preordained or inherent in the nature of man living in a society unregulated by government. Of explicit formulation by Bentham of a doctrine of natural harmony I can find not the slightest trace in his writings, and such a doctrine would be in basic conflict not only with his juristic theories but with his whole cosmological outlook. Faith in natural harmony always stems from either faith in the continuous intervention of a beneficent Author of Nature or faith in the workings of a natural evolutionary process, and the Benthamites rejected the former and had not yet heard of the latter.

It has been common since Adam Smith's day to take for granted in *economics* the role of the state with reference to the protection of legal property rights and the enforcement of contracts, leaving it to juristic inquiry to explore the problems of theory and of practice in this field. Such was also the procedure of Bentham, and in his juristic writings he keeps very much in mind that "passion . . . from the excesses of which, by reason of its strength, constancy, and universality, society has most to apprehend; I mean that which corresponds to the motive of pecuniary interest."¹⁶ Here he deals with the problem of "repression" of harmful economic activity by means of civil and penal law. If Bentham believed that there was a natural harmony of private and public interests in the economic field, it was one, therefore, which would prevail only after the magistrate and the constable had performed their duties.¹⁷

¹⁶ "Introduction to the Principles of Morals and Legislation," *Works*, Vol. I, pp. 90-91.

¹⁷ Bentham deals briefly with the relations between political economy and law in "A General View of a Complete Code of Laws," *Works*, Vol. III, pp. 203-4.

But Bentham does not advocate anything like "anarchy plus the constable." His most general proposition of a laissez-faire character is as follows:

With the view of causing an increase to take place in the mass of national wealth, or with a view to increase of the means either of subsistence or enjoyment, without some special reason, the general rule is, that nothing ought to be done or attempted by Government. The motto, or watchword of Government, on these occasions, ought to be—Be Quiet.¹⁸

This may sound like a sweeping enough support of laissez-faire, if, as is common though rarely desirable practice in such matters, it be read carelessly and out of its context. There are important qualifications, explicit or implied, within this apparently emphatic text. First, the text deals with "encouragement" and not with "repression" of economic activity. As I have already pointed out, Bentham deals with the problem of repression of harmful economic activity as a problem in law and not in economics. Second, the general rule of doing nothing positive is applicable only if there is no special reason to the contrary. A rule is not equivalent for him to a principle, nor a "motto" to a dogma.

Bentham presents three grounds for the general rule against governmental activity of a positive kind in the economic field: (1) in this field, individuals know their own interest better than government can; (2) individuals operate more ardently and more skillfully in pursuit of their own interests than government can or will operate on their behalf; (3) governmental intervention means coercion, either directly or indirectly through taxation, and coercion involves "pain" and therefore is an evil.

Bentham is ready to approve of any departure from the general rule, however, if a case can be made for such departure on utility grounds. "Indiscriminate generalizations" are an error, he says, and "In laying down general rules, [even] fortuitous and transient cases ought not to be forgotten." And he lives up to his doctrine as, for instance, when he says that "what ought not to be done with the intention of supporting an unprofitable branch of trade, may yet be proper for preventing the ruin of the workmen employed in such business," or, when opposing in general any restrictions on the introduction of labor-saving machinery, he approves, however, of transitory aid to workmen injured economically by such introduction.

Bentham does not, moreover, limit his exceptions from the non-intervention rule to fortuitous and transient cases, but presents an elaborate analysis of the circumstances under which government should

¹⁸ "Manual of Political Economy," *Works*, Vol. III, p. 33. All subsequent citations of Bentham are from the "Manual."

not ("non-agenda") and those under which it should ("agenda") intervene. The argument may, to some tastes, be weighted too heavily on the side of *non-agenda*, but it is free from any dogma except the utilitarian one with which it is supposed by Halévy to clash.

Whether government should intervene, says Bentham, should depend on the extent of the power, intelligence, and inclination, and therefore the spontaneous initiative, possessed by the public, and this will vary as between countries. "In Russia, under Peter the Great, the list of *sponte acta* being a blank, that of *agenda* was proportionally abundant." Government has special responsibilities for providing security against food shortages as well as military security. He approves of government aid in the construction of roads, canals, iron railways, of public hospitals for the sick, hurt and helpless, of public establishments for the "occasional maintenance and employment of able-bodied poor," and, as we have seen, of public health activities on a scale still unknown. He was an ardent advocate of general education at public expense and he urged the extension of governmental registration services to make fraud more hazardous—and also of the systematic collection of economic statistics, but with a proviso which I suspect saps his concession of most of its virtue for modern statisticians, namely, that "no institution should be set on foot for the furnishing any such articles, without a previous indication of the benefit derivable from such knowledge, and a conviction that it will pay for the expense."

Whatever its merits or defects, this treatment of the economic role of government is not in manner or substance doctrinaire, is not in any detail, as far as I can see, inconsistent with his general "principle of utility," and does not have in it, explicitly or implicitly, any trace of a doctrine of natural harmony of interests. It is to be borne in mind, moreover, that the best Bentham hopes for after all that can be done artificially to harmonize private interests with the public interest will still be far from perfect harmony. This has, indeed, been made the basis from another point of view of attack by moral philosophers of other faiths against utilitarianism: it is taken to task for failing to build a bridge between individual and general happiness. But this would be a valid criticism only if either it had professed to have succeeded in doing so and failed, or if it were a proper demand of *any* moral philosophy that it should provide a *practicable* scheme of perfect harmony of interests. Bentham did not completely bridge the gulf between private interests and the general interest, but neither did he deny the existence of such a gulf, and he did propose two ways, education and government, by which the gulf could be somewhat narrowed—with religion, though grudgingly, accepted as a useful part of education in so far as it educates for virtue. Does anyone know of a third way?

I turn now to John Stuart Mill. His famous *Autobiography*—revealing, but not as much so as he no doubt intended—made generally known the extraordinary intellectual régime to which he had been subjected as a boy by his father, and the precocity which resulted from it. In 1822, at the age of sixteen, he was engaging the redoubtable Robert Torrens in battle in the pages of an important newspaper about the theory of (economic) value. Before he was twenty he had edited Bentham's three-volumed work on the *Rationale of Evidence*, had published at least seven major articles in important periodicals on economic, political, and legal matters, had pointed out with great assurance and even less reverence the literary, political, economic, philosophical, and ethical shortcomings of the august *Edinburgh Review*, and had been arrested for distributing birth-control pamphlets.

In this first stage of his career, drilled to a rigid adherence to the Benthamite canon, J. S. Mill was a zealous exponent of Bentham's, and of his father's moral and political doctrines and of Ricardo's economics. In 1826, however, when still in his twentieth year, he underwent a mental crisis, which continued intermittently for several years and which brought him sieges of mental depression, as well as an intellectual conversion which he was later, in his *Autobiography*, to describe as akin to a religious "conviction of sin," the sin being in effect Benthamism.

It is conceivable that J. S. Mill's main trouble was primarily due to overwork, but his own explanation was that the sudden realization that the Benthamite doctrines left the nobler human feelings too much out of account and did not offer a sufficiently full prospect for human happiness had proved more than he could take. During these and subsequent years, he manifested the characteristic which was to remain prominent in all the rest of his career, his susceptibility to influence from widely diverse ideas or, as he was later to put it in his *Autobiography*, his "great readiness and eagerness to learn from everybody, and to make room in my opinions for every new acquisition by adjusting the old and the new to one another." New winds of doctrine were impinging on his mind, which was then as open as a prairie: Wordsworth's nature-poetry, with its reverence for beauty and its revelation—for a Benthamite—that there were other fruitful sources of impressions than those provided by syllogisms; the reading of one of Comte's early works and personal associations with Saint-Simonians, which brought him into contact with the new historical approach to social thought; Macaulay's refutation in the *Edinburgh Review* of his father's *a priori* demonstration of the superiority of democracy to aristocratic government; the conservative political views and the more-or-less orthodox religious views of his friends John Sterling and Frederick Maurice; the feudalistic and pre-

fascistic doctrines being expounded with fiery moral passion by Carlyle; and so forth. From all of them he borrowed something, although never as much as he then supposed, and for the most part not for keeps.

For a time, while his dour and magerful father still lived, the younger Mill did not break openly with the Benthamites, but his personal relations with the school became strained—more so, in fact, than he was ever to be aware of. Bentham, however, died in 1832 and James Mill in 1836, and freed from the restraint of their disapproval and evident disappointment, J. S. Mill began to explore the new ground on which he not too firmly stood by the hazardous procedure of putting his thoughts in print for the public to read.

The break was sharpest in the field of private ethics, where Bentham's and James Mill's interest had been least. In his economics, J. S. Mill remained faithful to the Ricardian doctrines as he understood them—and, to some extent, improved upon them in the process of interpreting them. In any case, the Ricardian economics was not wholly acceptable to Bentham, nor Bentham's economics at all acceptable to Ricardo. In the fields of politics and of law, J. S. Mill proclaimed some major departures in his thinking from the views of Bentham, but he never specified what they were. I think that, apart from some wavering as to the virtues of political democracy and some approaches to the benevolent Toryism of Coleridge, Wordsworth, Sterling, and Maurice, these were mainly methodological, loss of faith in the adequacy of the "geometrical" method in politics, rather than substantive.¹⁹ With his father's writings he never, it seems to me, dealt with complete frankness, and he reserved for Bentham blows which could more justly have been directed against James Mill. The harshness and vehemence of the attack on Bentham was no doubt a subconscious manifestation of the urge he was under to free himself from what he had come to feel was an intellectual straitjacket, but it had been his father rather than Bentham who had placed it on him.

The attacks on Benthamism began in 1833, while his father was still living but after Bentham had died, with critical "Remarks on Bentham's Philosophy" included, under cover of anonymity, as an appendix to Bulwer Lytton's *England and the English*. In 1838, or two years after his father's death, he published in the *London and Westminster Review* his famous full-dress article on Bentham, again anonymous, but with the authorship inevitably known at once to friends

¹⁹ For his attempt to substitute, under Saint-Simonian influence, a philosophy-of-history approach, see his series of essays on "The Spirit of the Age," originally published anonymously in the *Examiner* in 1831, and reprinted in 1942 by the University of Chicago Press, with a characteristically learned and penetrating introduction by F. A. Hayek.

and foes. In 1840, he published in the same *Review* an article on Coleridge, which, by its sympathetic treatment of the latter's ethical and political views, was indirectly a criticism of Benthamism.

Meanwhile, in 1835, in a review in the *London and Westminster* of a book by Adam Sedgwick which criticized utilitarian ethics as expounded by Paley, he had defended the principle of utility when properly expounded, but without mentioning any names had remarked that for a full exposition of it additional materials were needed beyond those already to be found in the writings of philosophers.

In these articles Mill was clearly endeavoring to salvage, or at least shrinking from abandoning, a utilitarian system of ethics while rejecting such features of Bentham's system as he could no longer tolerate. There was high praise, therefore, for Bentham as well as sharp blame. His main criticism of Bentham related to his treatment of private morals and of psychology, and especially the stress Bentham put on the role played in human behavior by calculation of gain or loss. He objected also that Bentham, by shifting from the technical (or broad) meaning of terms—and especially of the term "interest"—to a popular (or narrow) meaning, often slid into an account of human behavior which pictured it as inherently selfish. He explained this—unkindly—in terms of Bentham's personality. Bentham, said Mill, intellectually recognized the possibility of generous action, of benevolence, but "the incompleteness of his own mind as a representative of universal human nature" led him to regard genuine benevolence as rare and therefore unimportant in real life.

In many of the most natural and strongest feelings of human nature he had no sympathy; from many of its graver experiences he was altogether cut off; and the faculty by which one mind understands a mind different from itself, and throws itself into the feelings of that other mind, was denied him by his deficiency of Imagination.²⁰

There was a basis for Mill's criticisms. That Bentham frequently fell into language which pictured human behavior as if it consisted almost solely of action based on calculations of personal gain and that his imagination was deficient with respect to the possible range of human emotions is beyond dispute. But Mill goes further in his criticism at some points than the texts he cites, or their context, justifies, and in doing so disregards peculiarities of the Benthamite terminology which at other times, when his attitude had changed, he was to invoke against misinterpretations of Bentham at other hands. I can here deal with only one of these misinterpretations. Mill points out that if in

²⁰ "Bentham," reprinted in J. S. Mill, *Dissertations and Discussions*, 3rd ed., L. 1875, I. 353.

Bentham's *Table of the Springs of Action* we find such words as "Conscience," "Principle," "Moral Rectitude," "Moral Duty," which in the mouths of others represent recognition of such a thing as conscience as a thing distinct from philanthropy, affection, or self-interest in this world or the next, it is as synonymous for "love of reputation," and that the word "self-respect" appears not at all either here or in any of Bentham's writings.²¹ of Bentham who have since made the same criticism and used his *Table of the Springs of Action* as evidence are beyond enumeration.

There is only too much ground for criticism of Bentham for not using words quite as other men do, provided that deviation on his part from the common use of terms is not taken as reliable evidence of deviation from the common run of thought on the questions with which these words are usually associated. But Mill, who should have known better, makes use here of this kind of argument against the one person of all who by his discussions of the logic of language had made himself least vulnerable to it. Moreover, Bentham in his writings does use "conscience" and "duty" very much as other men do, and if he did not use "self-respect," his stock of synonyms was adequate to fill the void.

The *Table of the Springs of Action*, however, itself provides a more direct, though only a partial, answer to Mill's criticism. The psychology of Hartley and of James Mill from which Bentham started distinguished between "simple" pleasures, and "complex" or "compound" pleasures derived from the "simple" ones genetically by the processes of "association of ideas." Benevolence, generosity, duty, justice, conscience, and so forth would be "compound" pleasures. But Bentham expressly says of the *Table*—which is sufficiently formidable as it stands—that: "The pleasures and pains here brought to view are, every one of them, *simple* and *elementary*."²² He does cite a few "Compound Pleasures," as illustrative of one broad category of such excluded from the table. One of these, "Love of Justice," has as one of its components "Sympathy for the community at large, in respect of the interest which it has in the maintenance of justice." Mill was later to emphasize love of justice as one of the major virtues. His present refusal to be satisfied with Bentham's recognition of it as one of the "Springs of Action" was perhaps a not too captious suspicion that the words added to it by Bentham made of it a less admirable virtue than if Bentham had written merely "Love of Justice (Period)." But it was common ground among the Benthamites, including J. S. Mill, that the tone and moral significance of "compound pleasures" could be radically different from

²¹ *Ibid.*, I. 359.

²² *Works*, I. 207.

the tone and original significance of their component elements, the "simple pleasures" from which they had been compounded.

By the time Mill was working on his *Principles of Political Economy*, he had swung back a large part though not all of the way to Bentham's political theory and moral philosophy. What was left of his revolt was confined mostly to a continued insistence on recognition of the complete range of human feelings and a consequent endeavor to avoid exaggerating the role of rationalistic hedonism in human behavior.

William Whewell, an anti-utilitarian professor of moral philosophy at Cambridge University where an even narrower type of utilitarianism with hell-fire trimmings—"theological utilitarianism," it was later to be labelled—had until his advent reigned unchallenged for over a century, in 1838, on the appearance of Mill's article on Bentham, had in private correspondence with a friend welcomed Mill's recantation, but complained—with some justice—of its manner:

It is certainly very encouraging to see on all sides strong tendencies to a reform of the prevalent system of morals. The article [by Mill] in the *London Review* is an indication of this, and appears to me to be in many important points right, and at any rate right in the vigorous rejection of Bentham's doctrines and keen criticism of his character. But I confess I do not look with much respect upon a body of writers, who, after habitually showering the most bitter abuse on those who oppose Bentham's principles, come round to the side of their opponents, without a single word of apology, and with an air of imperturbable complacency, as if they had been right before and after the change. Nor do I see any security, in their present creed, against a change of equal magnitude hereafter.²³

This was real prescience on Whewell's part. In 1843, in conversation about the surviving disciples of Bentham, Mill made the remark which "though smilingly uttered . . . was not at all a jest" that as for himself: "And I am Peter, who denied his Master."²⁴ In 1852 Mill was to write a critical review of Whewell's *Lectures on the History of Moral Philosophy in England*, published in the same year. Conceding very little error in the Benthamite doctrine, Mill rejected vehemently Whewell's objections to utilitarian ethics in general and to Bentham in particular, even when they were very similar indeed to his own criticism of Bentham in 1838.

The final stage in Mill's presentation of his ethical views was in 1863, when his essays on Utilitarianism appeared. In form, these still represented an adherence to the doctrine, but so modified by the admission without obvious absorption of foreign elements that they have

²³ Mrs. Stair Douglas, *Life of William Whewell* (London, 1881), pp. 270-71.

²⁴ David Masson, "Memories of London in the 'Forties'," Blackwood's, Vol. CLXXXIII (1908), p. 553.

been the despair of its friends and the delight of its critics ever since. Acts were to be morally appraised solely in terms of their consequences for happiness—a strictly Benthamite proposition. *All* consequences, however, were to be taken into account, including the effects on the character of the agent—an early doctrine of Mill's, which he derived from Coleridge and which he regarded as contrary to Bentham's views, mistakenly, I think. Happiness was conceived broadly enough to cover every type of wish or aspiration man could experience. Mill—unwisely, I think—went a step further than Bentham ever ventured by offering a "proof" that happiness was the proper criterion of virtue: namely, that competent judges accepted it as such, a type of proof which eighteenth century critics of the "moral sense" school of ethics had exposed to ridicule for its circularity.

Mill now attempted also to incorporate into utilitarianism a novel element for it and one which many moral philosophers hold to be incompatible with it, namely, the recognition of non-homogeneity of pleasures and consequently the existence of qualitative differences of a hierarchial nature, as well as quantitative differences, between pleasures:

It is quite compatible with the principle of utility to recognize the fact, that some *kinds* of pleasure are more desirable and more valuable than others. It would be absurd that while, in estimating all other things, quality is considered as well as quantity, the estimation of pleasures should be supposed to depend on quantity alone.²⁵

The test of quality as between two pleasures was the preference "by those who are competently acquainted with both" of the one above the other despite the fact that the other represented a much greater quantity of pleasure.²⁶

I venture to suggest: (1) that the problem as Mill presents it, that is, within the limits of utilitarianism, is a spurious one; (2) that what he proffers as a solution is even more spurious; and (3) that Bentham and his predecessors to some extent and modern economists using utility theory to a larger extent, have provided a technique which, while it does not solve any fundamental moral problem, suffices to show that a dichotomy and possible clash between ratings of values on the basis of quality and their rating on the basis of quantity is not one of the fundamental moral problems.

²⁵ J. S. Mill, *Utilitarianism*, 3rd ed. (London, 1867), pp. 11-12.

²⁶ *Ibid.*, p. 12. In an undated manuscript "On Social Freedom," found in Mill's house at Avignon after his death, and published, among other places, in *Living Age*, 7th ser., Vol. XXXVI (1907), pp. 323-36, there is a stronger statement of the higher-lower thesis with the order of rank made a pure matter of "feeling," not subject to demonstration or to argument—a complete swing back to the eighteenth century "moral sense" school.

Pleasures—or desires—are of course not homogeneous with respect to every conceivable quality they may possess—any more than are any other objects of human attention except abstract numbers. Comparison is—or should be—always with respect to specified qualities of objects, and if there is possibility of and proper occasion for measurement the measurement is also with reference to these specified qualities.

Mill confuses the issue by attempting at the same time to give predominant importance to the ordering of *classes* of pleasures on a higher-lower scale and to leave room for legitimate preference in particular cases of a pleasure of a lower order over one of a higher. This is the famous and ancient false dilemma of the water-*versus*-diamonds problem in economics, extended to the whole field of values. Whatever may be the case for didactic purposes, for actual behavior—including “moral” behavior—the issues arise in the form of necessary choices between units and not between classes of objects. Bentham’s famous dictum “Quantum of pleasure being equal, pushpin [a children’s game] is as good as poetry” would meet all the proper requirements of the utilitarian principle if restated somewhat as follows: “Desire being equal at the margin of choice, a marginal unit of pushpin is as good as a marginal unit of poetry.” The utilitarian but didactic moralist would still be free to insist that since in fact experienced choosers don’t plump for even a first unit of pushpin until they are gorged with poetry, *in that sense* poetry as a class is higher on the scale of values than pushpin as a class.

I come now at long last to Mill’s *Principles of Political Economy*. He wrote this two-volume book in less than two years, and when he began it he expected it to take only a few months to write. For at least ten years prior to this, he had not given much attention to economics. It was designed to do for Mill’s time what Adam Smith had done for his, and to present what was known of the “Principles of Political Economy” as a science, together with their applications to concrete problems and, in the words of its title page, “some of their Applications to Social Philosophy.” By the “science” of political economy Mill meant a body of deductive analysis, resting on psychological premises derived from introspection and observation of one’s neighbors, and even with respect to these premises abstracting from all aspects of human behavior except those most intimately and most generally associated with the business of buying and selling. When Malthus, in 1824, objected that the “new school” of Ricardians had “altered the theories of Adam Smith upon pure speculation,” Mill had replied: “it would, indeed, have been somewhat surprising if they had

altered them on any other ground."²⁷ Later, as the result of Comtean influence and of his investigations in logical method, Mill was more receptive in principle to the possibilities of historical induction. But it is clear that he never assigned to it the right to an independent role in the "science" of political economy. Writing in 1835 with respect to the historical form of the inductive method, he had said:

History is not the foundation, but the verification, of the social science; it corroborates, and often suggests, political truths, but cannot prove them. The proof of them is drawn from the laws of human nature; ascertained through the study of ourselves by reflection, and of mankind by actual intercourse with them. . . . The usefulness of history depends upon its being kept in the second place.²⁸

This was, of course, standard methodological doctrine, and to a large extent practice, in English social thought since Hobbes. Inquiry was to be pursued by means of deductive reasoning resting on psychological premises obtained empirically, but chiefly through introspection—which, it should always be remembered, was universally regarded in the past, whatever may be the fashion today, as an "empirical" technique of investigation, and sharply distinguished from intuition, or "innate ideas." But in J. S. Mill, as methodological doctrine, it has less significance than for most of his predecessors, since he confines it to the "scientific" part of Political Economy, stresses the importance of "applications" which can proceed by a wider range of logical methods, gives repeatedly at least platonic warnings that any abstraction from reality must be allowed for before the results of such analysis are made the basis for pronouncements on policy, and rejects it for every other established branch of social thought.

Of his earlier rebellion against the psychology of Bentham and of his father, the most important residue for his economics was probably his repeated emphasis on the importance of custom as a rival to the competitive principle, especially in connection with land-tenure and the relations of landlord and tenant. Here he showed the influence of Richard Jones, one of the pioneer advocates of resort to systematic induction in economics. But this presented J. S. Mill with somewhat of a methodological dilemma, which he never succeeded in resolving. "It is unphilosophical," he wrote, "to construct a science out of a few of the agencies by which the phenomena are determined, and leave the rest to the routine of practice or the sagacity of conjecture."²⁹ On

²⁷ In a review of the article by Malthus in the *Quarterly Review*, No. LX, criticizing McCulloch's "Political Economy" article in the *Supplement* to the fourth edition of the *Encyclopaedia Britannica*, *Westminster Review*, Vol. III (1825), p. 213.

²⁸ "Professor Sedgwick's Discourse on the Studies of the University of Cambridge," *Dissertations and Discussions*, Vol. I, pp. 112-13.

²⁹ *A System of Logic*, 3rd ed., Vol. II, p. 472.

the other hand, "only through the principle of competition has political economy any pretension to the character of a science,"³⁰ a proposition which F. Y. Edgeworth was later in effect to repeat, when he wrote that if monopoly should prevail over a large part of the economic order:

Among those who would suffer by the new regime there would be [included] . . . the abstract economists, who would be deprived of their occupation, the investigation of the conditions which determine value. There would survive only the empirical school, flourishing in a chaos congenial to their mentality.³¹

We seem, however, to have found another alternative, that of becoming amateur lawyers.

Mill thus had no technique for dealing systematically with the analysis of economic process where competition was encroached upon either by custom or by monopoly, and when he did mention custom—or monopoly—he left it to the reader to estimate its importance and to make the necessary corrections in the conclusions he had reached on the basis of abstractions from these complicating factors. For himself, he assumed the responsibility only for that "uncertain and slippery intermediate region," between "ultimate aims" and "the immediately useful and practicable."³² Logicians and physical scientists have the right, I suppose, to jeer at Mill's failure to extricate himself from this plight. For those among us, however, upon whom the redeeming grace has not as yet been bestowed of that special ideology which takes the form of faith in the capacity of statistical method to perform logical miracles, humility is prescribed, since we are all in the same fix.

The *Principles* thus has no single methodological character. As is the case with the *Wealth of Nations* of Adam Smith, some portions are predominantly abstract and *a priori*; in others, there is a substantial measure of factual data and of inference from history. Its wide range of subject matter; the success with which the lucidity of its style and the nobility of its outlook on life divert attention from its lack of logical rigor; the patent honesty and open mindedness with which controversial issues are treated; these and other qualities made it probably the longest-lived textbook our discipline has ever had or ever will have. It was the text used in the first college course in economics I took, over sixty years after its first publication. Francis Walker's *Political Economy* was also assigned to us, and I think we showed good judgment when we labelled the course, as students will, "Milk and Water." Writing in 1832, Mill had presented a forceful case in defense

³⁰ *Principles of Political Economy*, Bk. II, Chap. IV, "Of Competition and Custom."

³¹ "The Pure Theory of Monopoly," [1897], *Papers Relating to Political Economy* (London, 1925), Vol. I, pp. 138-39.

³² *Autobiography* (London, 1873), p. 189.

of ambiguity in language, on the ground that it was for many persons the price which would have to be paid if important ideas which by their richness and variety of content it is difficult to make clear were not to be sacrificed on the altar of logical clarity.³³ The *Principles*, I think, demonstrate that for Mill himself this was good doctrine; it would have been an inferior book, much less rich in content—and much smaller in size—if Mill had thrown out all that was ambiguous and lacking in strict logical consistency.

What most struck his contemporaries in the contents of the *Principles* was the sympathetic manner in which Mill dealt with proposals for radical change along socialist lines in the economic structure of society. The sympathy was in large degree platonic, for in no major concrete instance did Mill actually commit himself to the desirability of a specific drastic change. Mill aspired after the millennium, but he found abundant reason why it was not and should not be wished to be imminent. He looked forward, mostly on ethical and humanitarian grounds, to substantial socialization of the institution of property at some time in the vague future. Meanwhile, however, he warned against any weakening of the institutions of private property, free competition, and the rule of the market. This combination of hard-headed rules and utopian aspirations was just exactly the doctrine that Victorians of goodwill yearned for, and it made a large contribution to the popular success of the book.

Mill's handling of the problem of laissez-faire was a case in point. Except for the difference in tone and feeling, the fuller expression of lofty ideals and impracticable aspirations, it was substantially similar in method of analysis and nature of conclusions to Bentham's treatment. Like Bentham, and like all the other major classical economists except perhaps Senior—who was not a Benthamite—J. S. Mill gave only a very qualified adherence to laissez-faire. It was for him only a rule of expediency, always subordinate to the principle of utility, and never a dogma. The dogmatic exponents of laissez-faire of the time were the Manchester School, and Mill—like Torrens before him and Cairnes, Jevons, Sidgwick, Marshall, Edgeworth and others after him—denied repeatedly, and forcefully almost to the point of blasphemy, that the Cobdenites had either authority or logic to support them when they invoked the "Laws of Political Economy" to stop government from coming to the relief of distress.

It is, fortunately, not part of my assignment to appraise the technical economics of Mill's *Principles*. What I have tried to do is to show the intellectual relations between two men important in the history of our

³³ Review of G. C. Lewis, *Use and Abuse of Political Terms*, *Tait's Edinburgh Magazine*, Vol. I (1832), p. 164 ff.

discipline. From these two men several generations of British and American—and above all Canadian—economists, and to some extent also “liberal” continental economists, derived in large part the psychological, ethical, political, and methodological presuppositions upon which they built their economic analysis. With the ebbing of liberalism in the profession, the importance of knowing what its intellectual foundations were has become chiefly historical, and to those under fifty the historical is not obviously important. But for those *over* fifty, a comment of Tawney’s is relevant. “It is a wise philosopher,” he writes, the flatterer really meaning “economist,” “who knows the source of his own premises.”³⁴ I would go even further. It is an unusually alert economist who knows what his premises are, regardless of their source. For those over fifty study of Bentham and of Mill can do something to remedy both of these lacks. Beyond this remark, I make no attempt to draw any moral from what I have said. But I believe that in exercising this unaccustomed measure of self-restraint I am conforming to the “Principle of Utility” if broadly enough interpreted.

³⁴ Introduction to Raymond W. Firth, *Primitive Economics of the New Zealand Maori* (London, 1939).

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PUBLIC EXPENDITURE POLICY

By PAUL J. STRAYER*

An increasing number of economists and political scientists are becoming concerned about the role of government in the economic affairs of the nation. Much of the recent writing on the subject has been negative and has emphasized the dangers of increasing governmental controls without offering any satisfactory solution to the problems that have made the increase inevitable.¹ On the other hand, most advocates of positive government intervention have not established a satisfactory basis for the long-run adjustment of relationships between the private and public sectors of the economy. This deficiency is recognized by such writers as J. M. Clark, F. D. Graham and Henry Simons.² Their greatest contribution has been their emphasis on positive long-run suggestions. This is a healthy trend and has been of great value. However, much more investigation and groping for solutions will have to be undertaken if guidance and leadership is to be given by moderate economists who would like to see the social and economic issues of the day met without resort to a planned economy. In particular, more attention must be directed to the problem of administration and the political implications of positive government economic programs. The inevitable interrelation and interaction of administrative and political forces with purely economic forces must be given greater emphasis if policy formulation is to be realistic and effective.

I. *Expansion of Government Influence*

One of the major difficulties of the present situation is the rapidity with which the expansion of direct government influence in the determination of market conditions has taken place. Prior to World War I, government finance was a minor factor. Even after World War I, the return to normalcy left the government in a relative insignificant position. It was not until the depression of the 1930's continued to the point where the inability of private business or private charity to cope with the situation was generally recognized that government became a major

*The author is assistant professor of economics in the department of economics and social institutions at Princeton University.

¹For example, see L. von Mises, *Omnipotent Government* (New Haven, 1944) and F. A. Hayek, *The Road to Serfdom* (Chicago, 1944).

²J. M. Clark, *Alternative to Serfdom* (New York, 1948). F. D. Graham, *Social Goals and Economic Institutions* (Princeton, 1942). H. C. Simons, *Economic Policy for a Free Society* (Chicago, 1948).

factor in the determination of the economic welfare of not only the recipients of relief and assistance but also of the entire private sector of the economy. The rise of the New Deal was the outgrowth of the impact of these events. However, the tentative nature of early New Deal spending and the annual promise that the budget would be balanced the *next* year, indicated that there had not yet developed a consistent theory or program that would permanently give to government a major role in the economic life of the nation.

It was not until the publication of *The General Theory of Employment, Interest and Money* by John Maynard Keynes that the beginnings of a consistent theory for short-range government intervention was formulated. It was no accident that the rise of the inner circle of "New Dealers" who advocated the conscious use of fiscal policy, without regard to established tradition, dates from the publication of this book in 1936. The development of the concept and measurement of the national income also aided in the formulation of a short-run theory and has given statistical support to the belief that variation of the government net cash surplus or deficit could offset fluctuations in effective demand in the private economy. The appeal of the fiscal approach was that it did not depend upon an understanding of all the basic reasons for fluctuations in the private economy but could be turned on or off as necessary.

The limitations of the Keynesian and neo-Keynesian theory have become more obvious in the period since the end of World War II. Fiscal policy was designed to use in periods of depression. Its logic can also be applied to control inflationary developments but the practical difficulties are much greater than in depression. The fear of many economists today is that reliance on fiscal policy to support full employment may be impossible as an inflationary bias arising out of monopolistic trade union activity and large industrial concentrations may permit both unemployment and inflation to occur simultaneously.³ There is also need for much more discussion than has yet taken place of the basis for the selection of the controls necessary to achieve the income effects desired to stabilize the economy.

In spite of the limitations of recommendations made to date, there is little reason to believe that we can return to the general acceptance of the role of government that prevailed in the pre-depression era. The passage of the Employment Act of 1946 and the commitments of both political parties to support a stable economy are testimony to the fact

³ A. G. Hart, "The Problem of Full Employment," *Proceedings, American Economic Review*, Vol. XXXVI, No. 2 (May, 1946). J. J. Spengler, "The Role of the State in Shaping Things Economic," *The Tasks of Economic History*, Suppl. No. VII to *Journal of Economic History*, 1947.

that the government is bound to play a more important role than ever before. The magnitude of the level of government outlays has increased both absolutely and as a percentage of the total national income. Our times are not likely to see the trend reversed. The level of taxation has increased proportionately and the severity of current levies is such that the impact of federal taxation alone may be greater than any other force that can be isolated for separate consideration by the average citizen or business concern.⁴ Management of the public debt now dominates the securities markets and government debt policy is more significant than the combined decisions of the largest financial houses in New York. Banks and the banking system are directly affected by the debt policy of the government and the whole theory of central banking policy has been permanently affected by the growth and influence of Treasury operations.⁵

It is significant that this growth in government influence has not been the result of a program of increased government ownership of the productive resources of the nation but is largely the result of the tremendous increase in the extent of transfer expenditures, the increase in war and defense outlays (production of war equipment still in the hands of private producers), and the rapid expansion in the level of foreign commitments and requirements in the postwar world.⁶ The increase in direct control of factors of production that has taken place in the TVA and in the steady increase in public services such as public education, health, and housing have been less important in their effect on the aggregate. With the exception of the expansion in the field of river basin development along the lines of the TVA, and the possible expansion in the role of government in the field of atomic energy, there is no immediate indication that further expansion of government ownership of production will take place.

II. Administrative and Political Problems

At the same time these revolutionary changes in the role of government in the economy have been evolving, equally important changes

⁴L. H. Kimmel, *Governmental Costs and Tax Levels* (Washington, 1948). Kimmel estimates tax collections by the federal government will have increased from 6.3 to 14.5 per cent of the national income between 1940 and 1952 and for all governmental levels from 18.8 to 24.8 per cent in the same period (p. 131). This is a very conservative estimate.

⁵Two articles by H. C. Simons and the recent study by C. C. Abbott are good offsets to the assumption of the more extreme Keynesians that the public debt can increase indefinitely. See H. C. Simons, *op. cit.*, Chapters IX and X, and C. C. Abbott, *Management of the Federal Debt* (New York, 1946), *passim*.

⁶Kimmel's estimates for 1952 indicate a probable cash expenditure of 40.5 billions by federal, state and local governments. Of this total, national defense, veterans' benefits, interest on public debt and foreign loans and relief account for 20.6 billions. L. H. Kimmel, *Governmental Costs and Tax Levels* (Washington, 1948), p. 12.

have been forced by the course of events in the field of political organization and control, and in the field of public administration. As is the case in the evolution of the changing conception of the economic role of government, the political and administrative changes have been tentative and have yet to jell into a clearly defined pattern. As yet no theoretical framework has been developed that would compare in influence to the work of Keynes and the issues have been less clearly defined than in the case of the debate over the economic role of government. The magnitude of the change is no less, however, and the need for reappraisal of political and administrative processes of government no less important. The most severe barrier to the modification of political and administrative practice to meet new conditions is found in the rigidity of the basic structure of American government with its emphasis on the division of power between the three branches of government and the unfortunate pattern of the boundaries of the state and local governments. The result has been that major innovations have been accomplished by the creation of new methods of control superimposed upon the old antiquated structure or by the temporary ascendancy of the executive. As the economic changes have brought reaction, so the political and administrative improvisation to meet new conditions have been fought by groups who oppose any change in the patterns established over the years.

The importance of the political and administrative aspects of the new role of government is no less than the purely economic. Whether success or failure is to be achieved will be determined as much by the way in which the controls are administered and decisions made as by our understanding of the basic economic conditions and influences.

These introductory paragraphs suggest that the formulation of policy or recommendation of a positive program is much more difficult than has been admitted by most writers in the field of fiscal policy. They have tended to look at the arithmetic of the situation as revealed by models constructed on the basis of national income estimates and have neglected the extent and severity of the repercussions of the actual measures that would be necessary to implement their programs of government stabilization of effective demand. A new approach to the role of government has to be developed to replace older concepts or to serve as a complement to them. A brief review of some current expenditure policy suggestions will reveal how much is yet to be done before a coherent and effective framework may be constructed.

III. *Theory of Public Expenditures*

Prior to the Great Depression of 1929 most discussions of government expenditure policy assumed full employment. The role of the

state was restricted to preservation of law and order, national defense, provision of certain social services, expenditure for the preservation and development of the natural resources, and limited investment in generally approved public works. The typical discussion developed the dogma that the least government was the best and that the burden of proof for increasing government expenditures should rest on the advocates of expansion. No rules that would permit the translation of these generalizations into definite figures were devised. It was assumed that expenditures would not change radically in the short run although much comment was devoted to the long-run trend toward higher outlays.

The inadequacy of these generalizations was well understood by John Stuart Mill when he wrote, "But enough has been said to show that the admitted functions of government embrace a much wider field than can easily be included within the ring-fence of any restrictive definition, and that it is hardly possible to find any ground of justification common to them all, except the comprehensive one of general expediency; nor to limit the interference of government by any universal rule, save the simple and vague one that it should never be admitted but when the case of expediency is strong."⁷

The long-run tendency for rising expenditures on the part of all levels of government in the United States has continued in spite of frequent assertions of the traditional doctrine, the desirability of minimal public activity. It is this shift to increased government and less private control that is the basis of most of the objections to further expansion of government. However, in spite of all protests, demands for increased appropriations tend to be more frequent and potent than demands for reduction. The failure of periodic Congressional drives for budget curtailment is evidence of the power of public demand for high-level appropriations.

A satisfactory theoretical solution of the problem of distribution of government and private expenditures has not yet been advanced. The suggestion made by Hart that "the common sense of public expenditures is to carry them to the margin at which they are of equal social value with alternative, private expenditures of equal amount, irrespective of revenues,"⁸ is too narrow to be of much use in the formulation of policy. It ignores the fundamental source of difference among those interested in the effects of alternate policies on the basic economic and political institutions of the country. It is also impossible to arrive at a reasonable judgment on the merits of a particular level of expenditure

⁷ John Stuart Mill, *Principles of Political Economy*, Book V, Chap. 1.

⁸ A. G. Hart, "National Budgets and National Policy: A Rejoinder," *Am. Econ. Rev.*, Vol. XXXVI, No. 4, Pt. 1 (Sept., 1946), pp. 632-36.

without consideration of the repercussions of alternate means of raising the necessary revenue. This is just as important when new money or credit is used as when the revenue is obtained by taxation. The generally accepted imperfections of revenue, monetary and credit systems in the United States gives additional force to this argument. Even if there were a perfect tax system and the control of money and credit left nothing to be desired, the difference between public and private financing of a given level of expenditures would be significant and have to be weighed in the decision as to the proper balance. No marginal analysis can give even an approximate answer to such questions as these. Finally, there are differences in the effects and implications of different levels of government expenditure at different levels of employment and national income. It has been suggested that the level of public expenditures, except transfer expenditures for relief and other forms of assistance, should be appropriate to an estimated "normal" national income and fluctuations in income ignored.⁹ The bias of the writer is in this direction but the reasons for such a policy are much more political than economic. A decision to follow such a course must neglect or weigh lightly the changes in relative availability of factors of production and changes in the needs and demands of the community over the cycle or in contrasting periods of secular stagnation or boom.

Still more difficult is the treatment of the exogenous forces that loom so large in the budgets of today, such as war or the repercussions of war, political and moral commitments to other nations, and the operations of pressure groups and vested interests which have proved to be successful in obtaining subsidies or special privilege at the expense of the rest of the country. The fact is, that in the United States today there is a very limited area where the voter has an opportunity to weigh or consider the advantages and disadvantages of alternate expenditure policies.

One must conclude that the hope of obtaining unbiased advice and guidance from the economist or student of public finance on the question of public expenditure is dim. The subjective judgments of the writer are of much greater significance in determination of his position than are the tools of economic analysis. He can be of service, however, in presenting fully his estimate of the possible implications of alternate policies for the education of the public. Policy decisions should be made on the basis of the fullest possible information. There is still much that needs to be done to raise the level of the debate to the point where decisions will be based upon true wishes of the majority. There will always be differences of opinion. It is to be hoped, however, that

⁹ See Milton Friedman, "A Monetary and Fiscal Framework for Economic Stability," *Am. Econ. Rev.*, Vol. XXXVIII, No. 3 (June, 1948), pp. 245-64.

they will be brought to the surface and more fully explored in the future than they have been in the past.

IV. *Expenditure Trends*

The trend for larger and larger social service outlays has been established for many years. Needs for government services have grown with the technological developments and with the rise of urban concentrations of population. However, the most spectacular increase in government expenditure has been in the field of national defense and war. This reflects both technological developments and a changing conception of warfare in the modern world. Total war is a new development and the experience of World War II indicates that it requires the complete mobilization of all economic and social resources if it is to be prosecuted effectively. The next most important cause of growth in expenditures is the increase in transfer expenditures: for debt service, for social welfare and security, and for the veteran. It is obvious that a large part of this increase can be attributed to the past war.

The significance of this trend is much greater than the immediate impact of the benefits or costs to the various segments of society. In the process of granting benefits and imposing taxes necessary to finance this new level of outlay, political and administrative decisions are becoming more and more significant in economic affairs. The character of output, the distribution of the output, and the total amount of production are all affected in ways that do not conform to the ideal of a free-market system. The only reason government and political influence have not been even more pervasive is that, at the same time the absolute and *per capita* level of government expenditures have been increasing, total national production has also been increasing. If the total national product should decline, there is no question that the percentage of the total controlled by government would increase at a more rapid rate. If this trend continues, the growth of government influence will give to government such a preponderance of authority that the chief characteristics of the free-market system will disappear.

The strength of the forces leading to further expansion of government expenditures is revealed if one surveys the recommendations of various professional groups concerned with the adequacy of the level of services and functions already performed by government. Convincing cases can be made for increased direct and transfer expenditures for public education, housing, health, old age assistance, defense, transportation, recreation and so on.¹⁰ Unless the productivity of the private

¹⁰ See estimates in J. Frederic Dewhurst and Associates, *America's Needs and Resources* (New York, 1947), *passim*.

economy increases over the years, the trend toward higher public expenditures will result in the government domination that was suggested above.

It is this point that has made the case for government compensatory spending so persuasive. The one thing that the private economy cannot tolerate is continued depression or stagnation. The productivity of the private economy must increase steadily if it is to survive. The danger is real as an even more rapid growth in public expenditures than yet experienced may be in prospect. This is certain if either widespread dissatisfaction with the private economy develops or large-scale defense appropriations continue to be necessary.

A second major argument for the use of government expenditure variation as a means of stabilizing the economy is that when there are unemployed resources the cost to society of the employment of idle factors by government is zero. Support of the private economy achieved in this fashion will temporarily shift the balance in favor of greater government control of production but this should be a temporary phenomenon if the activity is restricted to the period of depression.

V. *Limitations of Expenditure Manipulation*

The major issue is whether the government can vary its level of expenditures over the cycle without permanently increasing the proportion of the economic life of the nation under government control. It is this that private business fears, and not without reason. For example, counter-cyclical planning of public works has been suggested as the most effective means of supporting effective demand in a depression and at the same time making direct provision for unemployed workers. If it were possible for public works to be transferred from periods of prosperity to depression, the long-run level of public activity could be maintained constant. It is more likely, however, that the public will not permit the variation of public works expenditures in this fashion.¹¹ It is reasonable to suggest that, except for effects on employment and income, public works outlay should be greatest in

¹¹ Gerhard Colm's discussion of recent experience is revealing. He writes as follows: "The limits of an effective fiscal policy through manipulation of expenditures were demonstrated in August, 1946, when President Truman wanted to curtail expenditures as one of the measures for combatting inflationary pressure. He cut by two billion dollars a Federal budget that exceeded forty billion dollars. The rest of the budget was regarded as largely inflexible because it is determined by legislation or allocated for Government purposes that were believed to be nondeferable. It proved difficult to enforce even this limited curtailment program in view of resistance against the postponement of certain public works. The experience showed not only that flexibility in the Federal budget is limited, but also that our legislative and administrative machinery is not yet fully equipped to use even this limited existing flexibility." Gerhard Colm, "Fiscal Policy" in *The New Economics*, Seymour E. Harris, editor (New York, 1948), p. 464.

periods of prosperity and least in periods of depression. This follows from the fact that expansion in real income and activity leads to more extensive use of public facilities and demand for entirely new facilities. Auto and truck mileage increases, recreation facilities are more frequently used, school enrollments increase and schooling is continued for a longer time, water and power consumption increases and postal demands grow in periods of prosperity. These needs can be met only if public investment is increased. It does not make sense to tell voters that they should postpone their demands for better facilities until the uncertain day when there will be a depression. If existing facilities are inadequate, and they usually are, it is difficult to criticize the voter who demands immediate correction of this deficiency.

The selection of the most appropriate types of public works also raises many issues not yet solved. As the amounts involved in any works program must be large if real benefits are to be achieved, the choice of the most appropriate works is a major consideration. Unfortunately, consideration of projects on the basis of the need for improvements may lead to conflict with the private economy. If public works conflict with private industry, the discouragement to private investment that will result may perpetuate the very evil that the government is trying to correct. Another dilemma is that the reversibility of public investments tends to be in inverse relationship to the need for the project. Thus, the most useful of all programs that might be suggested at the present time is the development of other river basins along the lines of the TVA. Another project with a high priority would be the expansion of public housing. In either case, the project or projects, once under way, would be difficult to stop and might well be continued until they competed directly with the private economy for materials and labor and were the cause of inflationary price movements. The extent of this danger can be minimized by careful control and planning but it is likely that the results would be adverse to the private economy.

It has been suggested that these objections could be met if a public works program were planned on the basis of *future* needs. Thus, roads could be built to take care of future traffic, schools could be built and partially utilized in anticipation of future growth, and so forth. When prosperity returned, the problems of slowing down the rate of expenditure or stopping some projects entirely would not be difficult, so it is argued.

A critical examination of this suggestion reveals that it sounds more plausible than it is. In the first place, emphasis on future needs would tend to direct resources and labor to the less important jobs left to be done. As long as there are deficiencies in essential government services

and the need for the development and protection of natural resources continues to be as great as it is today, there is no practical limit to the amounts that could profitably be spent on improvement in these areas. Under these circumstances, how can the construction of a highway that is not needed at the moment be justified when there are thousands of miles of dirt roads left in the country? How can schools larger than needed in the immediate future be constructed when there are thousands that are below standard that should be replaced? Can a new post office be justified if the local hospital is inadequate to care for all the sick? Can housing that would be used immediately be neglected to build a community center adequate for the next fifty years?

As long as the current level of public service falls as short as it does of the public needs there is little chance that this approach will prove acceptable. Additional complications arise if the inadequacy of economic forecasting is considered. Predictions would have to be made that would determine the pattern of expansion of the country for years to come. If these proved to be as inaccurate as is usually the case, the waste and distortion of the economy would be so great that it might discredit the entire program. This sort of guessing game would also be an invitation to the pressure groups and lobbyists to come and feed at the public trough.

Suggestions to vary public works outlays have not been restricted to the benefits to be derived from the aggregate effects of such programs. It is argued that selective works programs are effective and desirable as a means of aiding specific industries or areas that are depressed and require special attention.¹² Thus, the construction industry has proved to be more vulnerable than the average industry and should receive special support. Similar cases can be made for most heavy investment industries and areas where these industries are major employers. Although not aided by a public works program, agriculture is another case where special action has been recommended and put into effect as a part of a campaign to relieve areas of greatest need.

There is no question that a realistic view of the needs and political demands of the public requires that provision be made for special cases beyond the general provisions of a recovery program. This does not justify the claim, however, that recovery may best be promoted by selective expenditure programs. Programs of this type may establish dangerous precedents and invite irresponsible political action designed to gain temporary political advantage for narrow pressure groups. Rather than correcting basic maladjustments, a selective program may prolong adjustment to changing conditions, or to changing technology

¹² A. H. Hansen, *Fiscal Policy and Business Cycles* (New York, 1941), pp. 262-63.

required to give maximum efficiency in the satisfaction of wants and utilization of resources. There is also danger that support will be given to monopolies or semi-monopolistic industries at the very time they are losing their monopoly power. A strong case may be made for selective programs attempting to maintain a balance between investment and consumption. Anything more requires greater precision than has yet been gained in the definition of the criteria for eligibility. What is a distressed industry or area? If an area or industry is to be given special relief, by what process is the relief to be tapered off? What rate of return should be allowed a subsidized industry? These are but a few of the questions that arise if selective control is considered.

The greatest danger of selective relief programs is that they will weaken the effectiveness of the free-market system by preventing losses from exercising their logical influence on the transfer of resources, labor, and management from declining to expanding industries. On the other hand, there is no possibility that the free market can be left to operate without some tempering of the severity of its influences in special cases. The problem can be solved if provisions for easing the impact of temporary unemployment in individual cases are improved. This involves expansion and liberalization of the provisions of unemployment insurance and dismissal pay, and the creation of an effective system of national employment offices. In the event of a major depression it is suggested that primary reliance be placed upon less selective means of promoting recovery until job opportunities are once more available to displaced workers.

Finally, counter-cyclical variation in government works expenditures runs up against a whole host of difficulties of a purely political and administrative nature. Most of these are familiar to even the most superficial student, but the one that deserves the greatest attention is often neglected. This is the possible effect of works programs designed to stabilize the economy on the structure of local government. One of the prized features of the political system of the United States is the reliance on local initiative and responsibility to provide the primary wants of the people in the community. Until relatively recent years this was possible and done rather well. Since the 'twenties it has become increasingly apparent that the old local government units can not do the job. Financial strength and administrative power are lacking. The first result has been to greatly increase the role of state governments and the extent of federal aid. On the whole, this has been to the advantage of all groups but the loss of local responsibility and initiative is a high price to pay. There is also danger that the centralization of power in the federal government will result in a form of corruption that will make the exploits of the city machines seem mild in comparison. This

was the fear of Henry Simons who believed that the activities of pressure groups and lobbyists had already brought this result in the period of the New Deal.¹³ What is feared is that decisions made by the central government will not represent the true needs of the people, but will lead to the diversion of billions of dollars into worthless projects that are of little good to anyone but have the backing of the most powerful lobbies in the national capital. This problem would be aggravated by the increased emphasis upon federal works as a means of stabilization. Many devices have been suggested to get around this difficulty but until there has been a major reform or revision in the relations of federal, state and local governments and perhaps reform in the entire local and state governmental set-up, there is danger that rapid expansion in the use of federal powers would establish patterns that would cause a deterioration in local and state government for some years to come.¹⁴

VI. Consumer Subsidies

The difficulties mentioned above have led to the suggestion that a more appropriate means of supporting effective demand would be outright cash grants to the public in the event of any significant decline in effective demand.¹⁵ These grants would either replace unemployment insurance or supplement it but would also be made to employed workers as well. The basic consideration would be to pay out enough money to support effective demand at full employment levels. In a period of full employment or inflation, the process could be reversed and surplus cash receipts retained by the Treasury or used to reduce the debt in an anti-inflationary fashion.

Proposals of this type suffer from two defects. First, is the common problem of all stabilization plans—the problem of timing payments to meet the true needs of the situation. Second, is the possibility that the support of consumer demand would not be sufficient to prevent the continuation of a decline in investment activity in a free-market system. There is also the danger that the removal of the connection between eligibility for grants and personal contributions and obvious need would invite the abuse of the system and would tend to reduce incentives over the long run. It is strange, however, that this is generally considered a more radical proposal than the use of public works or make-

¹³ Henry C. Simons, *op. cit.*, pp. 13-14.

¹⁴ J. M. Clark suggests that increases in federal public works projects are not justified until stabilization of essential current services is provided for. J. M. Clark, *Economics of Planning Public Works* (Washington, 1935), p. 76.

¹⁵ K. E. Boulding, *The Economics of Peace* (New York, 1946), pp. 164-65. A. P. Lerner, "Functional Finance and the Federal Debt," *Social Research*, Vol. 10, No. 1 (Feb., 1943), pp. 38-51. John H. G. Pierson, *Full Employment* (New Haven, 1941).

work projects. In terms of its effect on the main features of the free-market system this approach is the least disturbing of all that are commonly considered to be at all practical. Consumer freedom of choice would be fully protected and private control of production would be retained.

VII. Program Implementation

Even if it is assumed that there is agreement as to the type and timing of variable expenditures, there still remains the problem of the execution of this policy within reasonable time limits. As the federal government is by far the most influential, a successful solution of the problem of implementation of policy at this level is essential if effective results are to be achieved. In the first place, inspection of the major items of the current and expected future budgets of the federal government reveals that noneconomic considerations or contractual commitments are responsible for the greatest part of the budget.¹⁶ However, noneconomic considerations do not remain stable and may change within a very short time, as has been seen recently in the rapid expansion of defense and foreign aid appropriations. Thus, the most careful planning of works appropriations or welfare assistance may have to be modified overnight due to a shift in some other item in the governmental budget. Prediction of trends in the political sphere is even more difficult than the economic. One may conclude, therefore, that there must be a very effective and sensitive control mechanism designed to adjust the various elements in the federal budget to meet unforeseen developments as they arise. This control agency or group of agencies must be able to operate quickly and without lengthy debate.

In spite of the progress that has been made in recent years, the federal governmental system that has responsibility for execution of policy is not designed to be used in this fashion. The basic principle of division of powers that was established by the Constitution has made coordination of the executive, legislative and judicial branches of government necessary for effective management of complex economic plans or controls exceedingly difficult or impossible. Within the executive branch, the situation is almost as bad. At least twenty-one departments or agencies are independently charged with the formulation of policy on expenditures.¹⁷ Within the Congress the evolution that has led to consideration of appropriation bills by separate committees has proved difficult to coordinate and more difficult to modify. The practice of passing authorizations for public projects well in advance of appropriations makes the effective use of fiscal policy even more difficult. The

¹⁶ See notes 6 and 11 above.

¹⁷ C. C. Abbott, *op. cit.*, pp. 150-51.

recent reorganization of the Congressional committee structure has been generally discounted on the basis of the record since its enactment. The most encouraging recent developments are the expansion of the role of the Bureau of the Budget and the creation of the Council of Economic Advisers to the President. Both agencies can do much to make sense out of the existing chaos but as their authority is derived entirely from the executive, either a weak President or a recalcitrant Congress can prevent the best program from being executed.

Effective programming of federal financial policy may be most difficult at the very time it is most necessary. This follows from the fact that the chances of having a President of one political party and a legislative majority of another party are greatest in periods of rapid change or periods of economic dislocation. It is obvious that from a practical viewpoint some extensive reforms are necessary.

VIII. *Need for a New Approach*

Preoccupation with short-run solutions to the problem of stabilization and the use of an aggregate approach has led to the neglect of the long-range implications and obvious limitations of expenditure variation over the business cycle. On the other hand, the most severe critics of government intervention have ignored the public demand for higher standards of government service, the strength of noneconomic forces increasing expenditures such as war and defense, and the necessity of government intervention on a positive basis to prevent waste and suffering in the event of either inflation or depression.

The weakness of the noninterventionist's approach is obvious, and the trend toward increased government outlays continues in spite of their efforts to stop it. Any objective consideration of the level of government service and standards of public facilities indicates the need for increased expenditures and confirms the judgment that the demands of the electorate are not going to diminish. War, preparation for war and defense expenditures, along with the strength of the American dream of equal opportunity for all without regard to birth, assure the continuation of the trend. The extreme advocates of economy can achieve their objectives only at the price of inadequate defense or the destruction of the ideal of progress toward equality of opportunity for all. Neither price is one that a true democracy can pay.

The danger is that emphasis on the goal of stability and immediate action to offset adverse effects of a depression will result in so rapid a growth and concentration of political power that the free-market system will be seriously damaged. This danger arises because an increase in government expenditures invites the exercise of political influence as a means of achieving economic advantage. Once started, the trend

is likely to continue until the whole process of production and distribution is dominated by politics rather than the play of the forces in the market.

It is one thing to advocate the use of counter-cyclical government expenditures when the normal level of government expenditures is a small fraction of the total national income. It is another matter when the level reaches twenty-five per cent or more and there is no sign of a downward trend. No policy can be adequately assessed without consideration of the setting in which it is to operate. Certainly what was true in 1933 no longer holds. It is essential, therefore, that those interested in devising a stabilization policy that will be effective in the current situation and still remain compatible with the continuance of a free economy must pay attention to the changes that have taken place since the advent of the New Deal, particularly the financial repercussions of World War II.

In spite of the forebodings suggested above, or perhaps because of them, it is clear that there is still need for an effective government stabilization policy free of the adverse effects outlined above or the failure of the free-market system will lead to such reaction that it will lose the confidence of the electorate and the majority of thoughtful students of political economy. It is therefore necessary for those who are critical of some of the suggestions made in the past to offer reasonable substitutes.

In the paragraphs that follow, two sets of suggestions are made as a basis for a positive program in the current situation. The short-run suggestions are offered because there is need for immediate action to stop the current inflation and to cope with the depression that is likely to be upon us before the longer-range suggestions have been worked out.

The long-run suggestions are designed to focus attention on considerations relevant to the future health of the free-market system and the preservation of a democratic political system. Specific proposals made are not all original and can without doubt be improved upon. In many cases, the passage of time will indicate the advisability of shifting some of the objectives as well as the means sought to achieve them. There is no question, however, that an increasing amount of attention must be paid to the long-range implications of alternate policies if a radical change in our system is to be prevented.

IX. *Short-Run Policy*

The main objective of a short-run program should be the halting of the current inflation and the minimization of the adverse effects of the anticipated postwar depression. Another period of depression as long and as severe as the depression of the 1930's would be disastrous. It is

assumed that the need for action will arise before many of the longer-range reforms suggested below can be put into effect.

The first line of defense should be the built-in-flexibility in government budgets that arises from fluctuating revenues and maintenance of reasonably stable governmental expenditures over the cycle. This requires the continuance of a progressive tax system if constant rates are to produce a net government cash surplus to help curb inflation and a net deficit requiring new money or credit issue to help support effective demand in the event of a depression. Real progress along these lines is possible if federal aid is given to the states and local governments to support their normal services without reduction in depression. At the outset of a depression, this approach would seem to be preferable to a federal works program. As the federal contributions to states and local governments would be financed by the expansion of money supply, the income effects would be the same as if the federal government were spending the money directly. The use of state and local governments to administer the funds would prevent concentration of political power. Ideally grants or loans should be made on the basis of a formula measuring need, resources, past expenditure, and business conditions.

The advantage of such a system would be the minimization of political influence and the assurance that areas in greatest distress would receive assistance above the average. This suggestion is one that could be adopted in a short time. No major reorganization of government would be required and no radical change in the activities of government would be involved. Private investors would not find that it threatened traditional areas of private investment and the selection of projects could follow the patterns of the past. Some would be good and others wasteful but the general level would probably be better than would result from the log-rolling that is involved in the selection of projects on a national scale in Congress.

The major difficulty would be the political opposition to the granting of federal funds to the states and localities without detailed control and without opportunity to assure that benefits went to the majority party. This is true, however, of most any reform that tries to prevent the abuse of political power and can be overcome if there is sufficient demand for it by leaders of public opinion.

The problem of reduction of federal grants in the event of boom or continued prosperity is also substantial. State and local governments are no more anxious to tax their residents than the federal government and in the event of a change in status that indicated a reduction in funds from federal sources and either a reduction in state and local expenditures or an increase in the aggregate revenue collections by these gov-

ernmental jurisdictions, political opposition might prevent the sort of balance over the cycle that is indicated. This suggestion also assumes that the federal government would not tend to expand levels of expenditure in the event of a boom and contract in the event of a depression. If this happened, there would be need for an offsetting variation in revenues that might not be achieved by the normal fluctuations resulting from changes in national income. Although one must conclude that there is no automatic formula that will assure the results desired, this seems to be the best line of attack at the moment. Certainly nothing will be accomplished unless there is a greater degree of discipline and responsibility on the part of government officials and legislatures than has been the custom in the past.

The current problem of inflation is so tied to the mistakes of the past, the expansion in debt and liquid assets during the war, the shortage of capital and durable consumers goods, and the international commitments of the country, that the immediate situation seems to indicate a secondary role for fiscal policy as usually conceived. Certainly there is no reason to fail to maintain a revenue surplus and to make an effort to reduce the surplus of funds seeking to purchase scarce factors but in this situation a surplus on government account may be offset by an increase in private credit, an increase in velocity of existing money or monetization of the government debt, or some combination of the three. If further expansion of credit and monetization of debt is to be prevented, debt management and the central bank policy of the Treasury and the Federal Reserve System must be made more effective without delay. The failure to follow such a policy is, in large measure, the result of the fear that any effective action would precipitate a depression. Certainly the record of the past supports this fear. The record also suggests, however, that there is danger that failure to restrict money and credit expansion will lead to continued inflation and an even more serious aftermath.

Other short-run reforms are necessary in the tax systems of all levels of government if the effect of taxation is not to distort the normal market decisions of the business community and the consumer. First on the agenda is the reform of the definition of taxable income. Extension of provisions for loss realization and averaging would do much to prevent the possibility of the income tax adversely affecting investment. Improvements in equity that would result would also help make the tax more tolerable to the average citizen and the punitive features less marked. Full taxation of capital gains and allowance for losses with some averaging or step scale to allow for assets held over one year, is recommended as a means of both increasing the equity of the system and adding to the counter cyclical variability of the tax system. Closing the

tax exemption loophole would also do much to prevent the magnification of tax considerations in investment decisions. After these problems had been met, it might then be possible to tackle the problem of the double taxation of corporate income or at least reduce the level of the corporate tax.

At the state and local level there is equally great need for reform. Most states have a hodgepodge of taxes and the dependence of the local governments on the property tax has led to a continued weakening of their financial position and an increase in their dependence on state and federal governments for support. As a temporary expedient it is suggested that more attention be given to the possibility of state administered but locally assessed taxes.

Finally, the basis for meeting the expected crisis in employment and human welfare that seems least destructive is to expand the provisions for unemployment insurance in the event of need. The effectiveness of such grants can be improved greatly if the minimum levels of the poorer states are raised and the duration of the benefits are increased. The advantage of insurance is that the consumer still chooses the way in which he will spend his money and a minimum of political influence is involved.

It is still possible that the short-run suggestions made above will not be adequate to do the job. If this should be the case, the necessity of federal intervention on a larger scale would be clear and the decision as to the means to be used could best be made at that time. Both a work relief and a public works program are certainly in order in this event and there is nothing to be said against using both at the same time. If this is done, the standards for the larger public works projects might be maintained at a higher level and the prospect of establishing patterns of danger for the future minimized. Certainly the general reaction against many of the work relief activities in the 1930's served the useful purpose of hastening the reduction in government projects. The main point, however, is that the use of work relief or public works is not to be recommended at the outset and cannot be justified until there has been a full exploitation of other remedies.

The author is frankly not too optimistic over the possibility of achieving substantial stability in the short run. There seems to be no formula that will achieve this objective without a much greater concentration of power in the hands of the federal government than is compatible with the preservation of an economy that resembles the one we have enjoyed in the past. It is possible, however, that the effects of fluctuations can be tempered so that there will be time to institute more fundamental reforms correcting the basic reasons for fluctuations.

X. *Long-Run Policy*

Two long-run objectives are set forth as the most important in the current situation. First is the correction of the basic weaknesses of the system that cause or aggravate instability. Second, is the revision of governmental structure and procedure so that the performance of governmental functions can be efficient, decentralized and effectively controlled in a fashion compatible with the maintenance of stability and a free economy.

A detailed discussion of the first objective lies beyond the scope of this paper but there is general agreement that substantial progress in this direction depends on reform of the monetary and credit system, and the freeing of markets from the dominance of monopolistic restraints. Pursuit of these reforms raises the question of the extent of government *vs.* private control of credit and banking facilities, the possibility of achieving international monetary and trade reform in face of intense political rivalry, the question of labor-management relations, patent policy, wage-price policy, corporation and public utility regulation, and so on. The issue of monopoly is particularly important because the concentration of economic power in the hands of a few large corporations may well lead to the dominance of government by business even under the most favorable conditions with regard to stability. There is little to choose between this result and the dominance of business by government, but on the whole it would seem to be more distasteful.

The chances of achieving fundamental economic reforms will be improved if a long-range policy of governmental reform is instituted. A weak and divided government is not going to be successful in economic reform. Hope for rapid progress in this direction would seem to be greatly enhanced if much greater attention were directed to these issues, alternate programs discussed and a concerted effort to capture the support of leaders of public opinion were made. Certainly continuance of a makeshift system of government can only lead to difficulties as its significance increases.

In view of the position of the federal government at the present time attention must be directed first to the improvement in the operation of federal financial agencies and the coordination of the legislative and executive branches of government. A reasonable fiscal policy and expenditure control cannot be achieved by the present haphazard structure with its divided authority and lack of professional standards. If financial health is to be preserved and rapid adjustment to changing circumstances made possible, there is need for greater coordination of normal budgetary controls and monetary, credit, and banking controls than has been achieved to date. This requires the creation of a new agency

with responsibility for this work and the subordination of the Federal Reserve and Treasury as they exist today. The Bureau of the Budget has been suggested as the agency to do this job but it is not endowed with sufficient power to be effective. The ideal would be to create an authority given wide discretionary power but responsible to the Congress for the maintenance of certain basic conditions, such as the stability of price level. Preferably this agency would *not* be charged with the administration or preparation of detailed plans or programs needed in the event of depression. Its services would be used but if in spite of its effort there should be a need for more drastic measures, it would be better to have the authority for such a program given to a temporary agency which would see its job as a short-run affair. The reason for this suggestion is a desire to avoid pressure on the permanent agency to compromise its long-range program as the result of temporary changes in economic conditions.

Progress along these lines or other alternate programs that would hold out hope of improved fiscal policy is dependent upon the radical revision of the narrow view of the typical congressman. The inability of the average legislator to take a long view is largely the result of pressures brought to bear on him by his constituents and their ignorance of general economic policy but is actively supported by the committee system and the lack of effective party leadership on issues of broad economic policy, except for short periods. Detailed analysis of these issues would require another paper or a sizeable monograph but the immediate need for correction of these deficiencies must be established and greater interest taken by those who are concerned with economic policy as well as those concerned with political affairs.

The obvious need for better economic intelligence work on the part of the government must not be neglected. The improvement in this regard has been substantial in recent years but there is still much yet to be done. Some investment in the preparation of detailed plans of alternate programs to meet hypothetical situations would also prove to be desirable. A running inventory of the state of the nation's economy should be maintained at all times. The possibilities of prediction of major economic trends should be fully explored. An investment in a determined effort to predict economic trends by statistical methods might not pay off but it is only the federal government that can undertake such a program, and the rewards that would accrue as a result of even limited success would fully justify the gamble.

In the area of state and local governments, even greater need of reform of governmental structure exists. The existing pattern of political boundaries, established by accident or to meet conditions no longer

present, prevents the efficient discharge of governmental services in many areas and has left the financial structure of state and local government in an intolerable condition. The result has been bad government and government finance at the local and state level, the growth of reliance on the federal government for more and more assistance, and the direct assumption of responsibility by the federal government for jobs that should be done at other levels. As a consequence, little possibility of a coordinated attack on the major problems of the country by all governmental levels exists today.

Perhaps the best remedy would be the complete scrapping of all state and local governmental jurisdictions as presently constituted and the reorganization of governmental units of a size and covering an area that represents an efficient administrative unit. The obvious impossibility of achieving any reform of such a drastic nature suggests that new agencies be established to coordinate or assume many of the functions of the local governments. Political and social loyalties could remain in the original jurisdiction but the main job of government at the local level could be transferred to more effective units. This suggestion is subject to the criticism that even greater confusion would result from the multiplication of governmental organizations but the success of such a device in the case of the TVA and the Port of New York Authority gives hope that substantial progress can be achieved. Failure to act will have repercussions that are certain to be more troublesome as time goes on.

Finally, there is need for a revision of the objectives of the average citizen and the average business leader. The exclusive concentration of the average man on his business, locality and personal economic affairs must be changed if many of the reforms suggested can be put into operation. How this may be done is the question. One of the best means is leadership on the part of governmental officials, legislators, and businessmen. The first step should be an all-out effort to improve the calibre of men in high office and their education in the major issues of the day. Propaganda cannot do the job but constant reiteration of the major issues yet to be faced will help raise the level of public interest and encourage better thought and action.

The advances in international trade policy in recent years and the widespread support of a more realistic international policy by large segments of the business community are signs that progress can be made. An agency that holds out hope for the future is the Committee for Economic Development which has sought to promote understanding and to develop a consensus rather than the promotion of a narrow business view. Education in economic affairs cannot start too early nor

continue too long. Although there is obvious need for specialized research to improve our understanding of economic and political affairs, the greatest opportunity for progress lies today in the increase in the effectiveness with which existing knowledge is used.

FEDERAL RESERVE POLICY AND THE FEDERAL DEBT*

By LESTER V. CHANDLER

It is common knowledge that monetary management in this country has for several years been strongly influenced, if not dominated, by considerations related to management of the federal debt. With this debt amounting to more than \$250 billion and comprising about 60 per cent of all outstanding debt in the country, the foremost objective of our monetary policy has come to be "the maintenance of an orderly market in government securities" and the prevention, or at least a limitation, of the rise of yields on these securities, especially on the long-term issues. Though the rise of this new objective has been the subject of widespread discussion, the writer believes that its full implications are not generally appreciated. The purpose of this article, therefore, is to trace the rise of this policy objective and to raise some questions concerning its consequences.

The Evolution of the Policy before Pearl Harbor

Prior to 1937 Federal Reserve purchases and sales of government securities were primarily for the purpose of influencing the volume of member bank reserves and of member bank borrowings at the Reserve Banks. These were, of course, designed to affect interest rates, including yields on governments, but the effects were expected to result mainly from changes in the ability and willingness of banks to lend and purchase securities. But in 1937, apparently for the first time as a major policy objective, the Federal Reserve bought long-term governments for the purpose of limiting their price decline. After reaching high levels in late 1936, the prices of long-term governments and high-grade corporate bonds began to fall early in 1937. This decline did not extend to Treasury bills and notes. The Reserve System thereupon initiated what it called its "flexible portfolio policy," purchasing more than \$200 million of the longer-term bonds and reducing its holdings of the shorter-term notes and bills by about \$150 millions. The decline of government bond prices was stopped and reversed.¹ By such operations the System influenced directly—not merely through its effects on bank

*This material will become part of a broader study of the process of inflation in the United States since 1939, a study which the writer could not have undertaken without generous financial assistance from the Merrill Foundation For Advancement of Financial Knowledge, Inc. The author is professor of economics at Amherst College.

¹Board of Governors, *Annual Report*, 1937, pp. 5-7.

reserves—the yields on both long- and short-term government securities and indirectly the yields on others.

The avowed purpose of this policy was (1) to exert an influence toward orderly conditions in the money market, and (2) to facilitate the orderly adjustment of member banks to the increased reserve requirements effective May 1, 1937.² In justifying its policy the Board said,

In recent years the bond market has become a much more important segment of the open money market, and banks, particularly money-market banks, to an increasing extent use their bond portfolios as a means of adjusting their cash position to meet demands made upon them. At times when the demands increase they tend to reduce their bond portfolios and at times when surplus funds are large they are likely to expand them. Since prices of long-term bonds are subject to wider fluctuations than those of short-term obligations, the increased importance of bonds as a medium of investment for idle bank funds makes the maintenance of stable conditions in the bond market an important concern of banking administration.³

The System continued its flexible portfolio policy from early 1937 until after Pearl Harbor, though no extensive operations were necessary in 1938 and early 1939.⁴ Its next major operation in governments occurred in September, 1939, when the outbreak of war in Europe led to a sharp decline of bond prices. To stop this decline the System did two things: (1) It announced that all the Reserve Banks stood ready to lend on government securities at par value to non-member as well as member banks, the discount rate to be the one applicable to such loans to member banks. The rate at New York and Boston was 1 per cent, and five other Reserve Banks instituted a preferential 1 per cent rate on loans secured by governments. (2) It purchased nearly \$500 million of bonds in the open market. The Board justified these stabilizing purchases on two principal grounds: (1) To "exert a steadying influence on the capital market, which is an essential part of the country's economic machinery, and disorganization in which would be a serious obstacle to the progress of economic recovery," and (2) to safeguard the large United States government portfolio of the member banks from "unnecessarily wide and violent fluctuations in price."⁵

At only one other time between late 1939 and Pearl Harbor did the Federal Reserve find it necessary to purchase governments to cushion

² *Ibid.*, p. 6.

³ *Ibid.*, p. 7.

⁴ For evidence that the Federal Open Market Committee continued to be concerned with maintaining an orderly market in governments, see Board of Governors, *Annual Report*, 1938, pp. 77-79. In the early part of 1939 the System allowed its holdings of Treasury bills to decline markedly because they could be replaced only on a virtually no-yield basis. By the end of the year it held no bills.

⁵ Board of Governors, *Annual Report*, 1939, p. 5.

a decline of their prices. This was in the spring of 1940, following the invasion of Norway and Denmark and later the Low Countries, when bond prices began to decline and the Reserve System added somewhat to its holdings.⁶ During the rest of 1940 the System decreased its holdings of long-term governments by about \$300 million, thereby retarding the rise of bond prices that occurred as outside demand recovered strongly, partly because of large additions to bank reserves resulting from voluminous gold inflows. The Reserve Banks maintained their holdings of governments practically stable during 1941 until the price break following Pearl Harbor, at which time they bought \$60 million of bonds and \$10 million of bills.

In summary, by the time the United States entered World War II the "maintenance of an orderly market for government securities" had already become an important consideration in Federal Reserve policy. The Reserve System was buying and selling governments to protect member banks against "unnecessarily wide and violent fluctuations" in the prices of the government securities that they held; to exert an indirect influence on other interest rates in the market; and to remove obstacles to economic recovery. It had not yet, however, reached the point of "pegging" government prices at stated levels and standing ready to buy all these securities offered to it at the pegged prices. In other words, it was maintaining an "orderly market for governments" in the sense of preventing "disorderly" changes in their prices and yields, but it was not yet maintaining a rigid yield pattern.

Federal Reserve Policy During the War

Upon our entrance into the war, the maintenance of an "orderly market for government securities" at low interest rates became not merely an important objective, but the clearly dominant objective, of Federal Reserve Policy. The Board of Governors assured the public on December 8, 1941 that the Federal Reserve could and would see that the Treasury was supplied with all the money that it needed for war finance.

The existing supply of funds and of bank reserves is fully adequate to meet all present and prospective needs of the Government and of private activity. The Federal Reserve System has powers to add to these resources to whatever extent may be required in the future.

The System is prepared to use its powers to assure that an ample supply of funds is available at all times for financing the war effort and to exert its influence toward maintaining conditions in the United States Government security market that are satisfactory from the standpoint of the Government's requirements.⁷

⁶ Board of Governors, *Annual Report*, 1940, pp. 3-4.

⁷ Board of Governors, *Annual Report*, 1941, p. 1.

This promise was amply fulfilled. The war effort may at times have been impeded by other shortages, but it never suffered from a lack of money. Thanks to a highly liberal Federal Reserve policy, the Treasury could get from the Reserve Banks or from commercial banks any funds that it needed beyond those secured by taxation and by borrowing from non-bank sources. Of the \$230 billion increase of the federal debt from June, 1940 to December, 1945, nearly \$75 billion was taken by commercial banks and \$22 billion by the Reserve Banks.

Moreover, a generous Federal Reserve policy enabled the Treasury to borrow these tremendous sums of money at low and slightly declining rates of interest. At the time of our entrance into the war the excess reserves of member banks amounted to nearly \$7 billion, and during the preceding five years they had only rarely been less than \$2 billion. Under these conditions and with a shrunken demand for investable funds, the whole structure of interest rates had fallen to low levels, and rates on safe short-term paper were low indeed. This situation was continued throughout the war period. In March, 1942 the Federal Open Market Committee agreed with the Treasury that the general market for governments "should be maintained on about the then existing curve of rates (but that this did not mean special support for issues which might be out of line or that any issue must be held at par or at any other fixed price)."⁸ The pattern of pegged rates above which market yields were not permitted to rise until well after the end of the war was $\frac{3}{8}$ of 1 per cent on 90-day Treasury bills, $\frac{7}{8}$ of 1 per cent on 12-month certificates of indebtedness, and higher rates on longer-term issues ranging up to $2\frac{1}{2}$ per cent on the longest-term taxable bonds.

The Federal Reserve helped maintain this pattern of low yields on governments in two principal ways.⁹ First, but less important, was the maintenance of low discount rates. The Reserve Banks stood ready to make advances at a discount rate of 1 per cent to both member and non-member banks up to the full par value of any government security offered as collateral, and they established a preferential rate of $\frac{1}{2}$ of 1 per cent on advances to member banks secured by governments maturing or callable within a year. Since the member banks owned an ample volume of the shorter-maturity issues, only the $\frac{1}{2}$ of 1 per cent rate was significant in most cases. This willingness of the Federal Reserve

⁸ Board of Governors, *Annual Report*, 1942, p. 104. See also pp. 12 and 106.

⁹ We need not deal at length with the lowering of reserve requirements of central reserve city banks from 26 to 20 per cent in 1942, the exemption of War Loan Deposit Accounts from member bank reserve requirements and FDIC assessments beginning in 1943, and the 1942 legislation authorizing the Federal Reserve to purchase securities directly from the Treasury but limiting such holdings at any one time to \$5 billion.

to lend at low interest rates was reassuring to some banks, but few of them found it necessary or desirable to take advantage of the opportunity. Banks needing funds could secure them more cheaply by selling low-yield Treasury bills to the Reserve Banks. Federal Reserve discount rates had already become largely meaningless.

The much more important method of preventing yields on government securities from rising above the pattern agreed upon with the Treasury was Federal Reserve open-market operations. The System relinquished its initiative and its accuracy of control over the volume of governments that it held in order to prevent yields from rising above the established pattern. The loss of initiative by the Federal Reserve was most obvious in the case of Treasury bills. On April 30, 1942, the Federal Open Market Committee ordered the Reserve Banks to buy all Treasury bills offered to them at $\frac{3}{8}$ of 1 per cent yield. And in October of that year it ordered the Reserve Banks to grant repurchase options to sellers of bills, permitting them to repurchase at $\frac{3}{8}$ of 1 per cent yield the bills that they had sold to the Reserve Banks. In this way the yield on Treasury bills was held constant until mid-1947. Moreover, Treasury bills were made as safe and liquid as money itself so the banks had no reason to hold large excess reserves. In a similar way, the Federal Reserve stood ready to buy all 12-month certificates of indebtedness offered to it at its $\frac{7}{8}$ of 1 per cent posted buying rate. Though no rates on longer-term issues were formally posted and publicized, the Federal Reserve nevertheless purchased these issues in whatever quantities were necessary to prevent their yields from rising above the established pattern, and it sometimes sold them as their yields fell below the pattern levels. Thus the Federal Reserve lost almost completely its initiative in open-market operations; its holdings of governments were determined by the Treasury as issuer of the securities and by other institutions and persons as buyers and sellers of them. It had to monetize all the outstanding governments that others were not willing to buy and hold at the established pattern of rates.¹⁰

As mentioned earlier, the pattern of yields on governments agreed upon by the Federal Reserve and the Treasury reflected, in general,

¹⁰ The London *Economist* (August 4, 1945), pp. 161-62, has argued that the loss of initiative by central banks originated not during the war but during the Great Depression when central banks initiated easy-money policies. They could assure the continuance of cheap money only by standing ready to supply all the money that the public elected to hold at low interest rates. This is in a sense true, but the cheap-money policy of the depression period was initiated to encourage general business recovery and could presumably be reversed if spendings approached a dangerously high level. We shall see later that an easy-money policy aimed primarily at holding down interest costs to the Treasury and protecting bondholders against loss in terms of money may lack this element of reversibility.

the pattern prevailing in the market in the early part of 1942. The principal exception related to 90-day Treasury bills, whose yield averaged less than 0.30 per cent in April, 1942 and which were pegged at the higher level of 0.375 per cent at the end of that month. It developed later that the short-term Treasury bills with their $\frac{3}{8}$ of 1 per cent rate and even the 12-month certificates with their $\frac{7}{8}$ of 1 per cent rate were less attractive to investors than the longer-term securities with yields up to $2\frac{1}{2}$ per cent. This trend became clear only after the end of 1942. During the first year of our participation in the war, Reserve Bank holdings of governments rose about \$3.7 billion, the increase being about equally distributed between the shorter-term bills and certificates on the one hand and the longer-term notes and bonds on the other. But during the remainder of the war and for some time thereafter, offerings to the Federal Reserve were composed almost entirely of bills and certificates. In fact, while its holdings of bills and certificates rose from \$1.9 billion at the end of 1942 to \$22.4 billion at the end of 1946, the Federal Reserve was able, owing to the strong outside demand for them, to reduce its holdings of the longer-term notes and bonds from \$4.1 billion to \$1.4 billion. And even so, the longer-term issues rose to a premium, the longest maturities reaching a peak premium of about 7 per cent and their yield declining to about 2.1 per cent in early 1946.

Though other factors contributed, the principal reason for this shift of investors' preferences toward the longer-term issues was undoubtedly the announced policy of the Treasury of not raising the interest rates to be carried by successive new issues and the Federal Reserve policy of preventing the prices of governments from falling below the pegged levels. In such a situation the conventional distinction between short and long maturities lost much of its meaning. So long as the Federal Reserve continued to support the prices of the longer-term issues, every one of them was perfectly liquid at the pegged price, as much so as the shortest-maturity Treasury bill. An investor could rationally prefer a shorter-term government with a low yield over a longer-term government with a higher yield only to the extent (1) that the longer-term issue was selling at a premium over the Federal Reserve support price and there was a risk that its price would decline, or (2) that the Federal Reserve would lower its support prices. In view of the fact that both official pronouncements and the problems of debt management strongly indicated that yields on the longer-term governments would be prevented from rising significantly not only during the war but also for an indefinite period thereafter, it is small wonder that the Federal Reserve as residual buyer came to hold a

large proportion of the shorter-term low-yield issues, thereby adding to bank reserves, while other investors bid down the yields on the longer-term issues.

*The Federal Reserve and Government Security Prices
Since the End of the War*

Remembering the history of its policy before World War II, and especially before 1937, one might have expected the Federal Reserve to abandon its easy-money policy and to quit supporting the prices of government securities on a low-yield basis as the Treasury ceased to be a net borrower and began to reduce its debt in 1946 and as inflation gained momentum. But no significant change of policy occurred until mid-1947.¹¹ Until this time the Federal Reserve continued virtually without change the wartime pattern of its support prices, though its officials repeatedly warned Congress that without additional powers they could not simultaneously continue to support government security prices and combat inflation effectively. The first departure from the pattern of yields maintained during the war came in July, 1947 when the Federal Open Market Committee eliminated the $\frac{3}{8}$ of 1 per cent posted rate on Treasury bills and announced that the yield on bills would thereafter be expected to find its proper position in the market relative to the rate on certificates, which continued to be pegged at $\frac{7}{8}$ of 1 per cent. The Committee emphasized, however, that the System would continue to purchase and hold bills to the extent necessary to maintain an orderly market.¹² The second departure from the wartime pattern came in August, 1947 when the Federal Open Market Committee discontinued its $\frac{7}{8}$ of 1 per cent buying rate on certificates and embarked on a policy of preventing yields from rising above the Treasury issuing rate on new certificates. The Treasury thereafter gradually raised the rate on newly issued certificates to $1\frac{1}{8}$ per cent. This permitted the yield on Treasury bills to move up to about 1 per cent. These levels prevailed until the late summer of 1948.

The third departure from the wartime pattern occurred in December, 1947 when the Federal Reserve lowered somewhat its support prices of longer-term governments. As already noted, the prices of these longer-term securities were considerably above par in 1946 and early 1947.

¹¹ It is true that the Federal Reserve in the spring of 1946 eliminated the right of non-member banks to borrow on government securities at the 1 per cent rate; that about the same time it eliminated the preferential rate of $\frac{1}{2}$ of 1 per cent on advances secured by governments maturing within a year; and that in the summer of 1946 it raised acceptance buying rates from $\frac{1}{2}$ of 1 per cent to 1 per cent. But for reasons that will be indicated later these actions were relatively ineffective.

¹² Board of Governors, *Annual Report*, 1947, p. 93.

In April, 1947 the average premium on taxable bonds with 15 or more years to maturity was about 4.6 per cent and the yield had declined to 2.19 per cent. Believing that these yields were too low, the Treasury sold between April and the end of October about \$1.8 billion of bonds out of its own investment accounts, and in October offered for sale a new issue of nonmarketable 2- $\frac{1}{2}$ per cent bonds.¹³ These sales, coupled with the rise of short-term rates, large flotations of corporate securities, and a general rise of the private demand for loan funds, caused the prices of long-term governments to fall and yields on the longest-term issues to rise to 2.37 per cent in November. The decline was apparently considered too rapid, for the Federal Reserve stepped in and increased its holdings of bonds by about \$2 billion during November and up to December 24. Then, the day before Christmas, the Federal Open Market Committee lowered its support prices for the longer-term issues. No government security was allowed to fall below par, however, and the Federal Reserve purchased vigorously to support the new pattern of prices.¹⁴

The fourth departure from the older yield pattern came in August, 1948 when the Secretary of the Treasury announced that on October 1 the rate on new certificates would be raised from 1- $\frac{1}{8}$ to 1- $\frac{1}{4}$ per cent.

Several aspects of these Federal Reserve and Treasury actions in 1947 and 1948 should be noted. (1) The structure of yields on governments was permitted to rise somewhat, the yields on short-term issues rising more than those on longer-terms. Between June, 1947 and October, 1948 the yield on bills rose from 0.375 to about 1.1 per cent, the yield on certificates from 0.875 to 1.25 per cent, and the yield on the longest-term bonds from 2.2 to 2.48 per cent. Yields on other comparable types of debt moved in a roughly parallel manner. (2) These actions indicate a shift of stabilizing operations away from short-term rates and toward long-term rates. From early 1942 until July, 1947, the Federal Reserve pegged the bill rate at the low level of 0.375 per cent

¹³ Federal Reserve Bank of Boston, *Monthly Review*, January, 1948, p. 7.

¹⁴ The Federal Open Market Committee's decision to take such action was arrived at in its meeting on December 9, 1947. Action was to be deferred until after the Treasury's January refunding operations had been completed unless market selling increased substantially. "It was understood that . . . the executive committee would continue the existing prices at which Government securities were being supported until after the Treasury January refunding had been completed, at which time prices of bonds should be permitted to decline rapidly, if the market did not support itself, to a level not more than 100- $\frac{1}{2}$ and not less than par on the longest restricted 2- $\frac{1}{2}$ per cent issue and to not less than par on 1- $\frac{1}{8}$ per cent one-year certificates. It was also understood that if, before the completion of the January refunding, market selling should increase substantially, the executive committee would be authorized to permit prices to decline to the level stated above as rapidly as was consistent with the maintenance of orderly market conditions." Board of Governors, *Annual Report*, 1947, p. 97.

with the result that the yields on long-term governments tended to be depressed below their 1942 levels. But the 1947-1948 actions show a tendency toward concentrating attention on preventing the longest-term rate from rising above $2\frac{1}{2}$ per cent while allowing shorter-term rates to rise relative to it. (3) These actions indicate some willingness of the Federal Reserve and the Treasury to reintroduce a degree of upward flexibility in interest rates. But the implications of these actions for the future must not be exaggerated. In the first place, they do not indicate that the Federal Reserve has abandoned its objective of "maintaining an orderly market for government securities" at low-yield levels. Both by its pronouncements and by its continued security purchases in the face of inflation, the Federal Reserve has indicated that the maintenance of government security prices is still a dominant policy objective. And in the second place, the fact that the Federal Reserve has allowed some rise of interest rates does not necessarily mean that it will permit further significant increases. This point will be amplified in later paragraphs.

Federal Reserve Support of Government Security Prices in the Future

Will the Federal Reserve in the foreseeable future abandon the support of government security prices and the maintenance of low yields as the dominant objective of its open-market operations in order to be free to combat inflation vigorously? All the available evidence indicates that this is highly unlikely with respect to the long-term governments, though future policy with regard to short-term issues is more uncertain. Several officials, including the chairman of the Board of Governors, the former chairman, and the president of the Federal Reserve Bank of New York, have stated emphatically their determination to prevent the long-term rate from rising above $2\frac{1}{2}$ per cent.

Typical of their statements is that of Marriner Eccles, former chairman, in December, 1947:

The one thing you cannot do is to have confidence shaken in that $2\frac{1}{2}$ percent rate. If you let that go below par, there is always a question, where does it go? Because people remember, a great many of them, what happened after the last war when they let those securities go below par.¹⁵

¹⁵ *Hearings Before the Joint Committee on the Economic Report*, December 10, 1947, p. 620. See also Eccles' statement in *Hearings Before the Joint Committee on the Economic Report*, April 13, 1948, p. 16. Chairman McCabe takes a similar position: "... I have a very strong conviction that it is vitally necessary to support the $2\frac{1}{2}$ per cent bonds. ... I would not say it is our policy forever. I say for the foreseeable future." *Hearings Before the House Banking and Currency Committee*, August 2, 1948, p. 101. For a concurring statement by President Sproul of the Federal Reserve Bank of New York, see *Hearings Before the Joint Committee on the Economic Report*, May 12, 1948, pp.

Though the Federal Reserve and the Treasury appear determined to prevent yields on the longest-term governments from rising above $2\frac{1}{2}$ per cent in the "foreseeable future," they appear less reluctant to allow the yields on short-term issues to rise above the levels prevailing in mid-1948, so long as the rise is not great enough to upset the market for long-term governments. Eccles stated in April, 1948,

I want to make another matter clear: We have never made the statement that we should support all Government securities at par. What we have said is that we should maintain the $2\frac{1}{2}$ percent rate on the long-term bonds. That should be the basic long-term rate.

The short rate should be permitted to fluctuate to the extent that it can be useful.¹⁶

President Sproul of the Federal Reserve Bank of New York agreed with this principle.¹⁷ In August, 1948 Eccles again argued the rate on certificates should be raised above $1\frac{1}{8}$ per cent, and seemed—though his statement was not clear on this point—to favor a gradual withdrawal of Federal Reserve support from short-term governments while firmly supporting the long-term issues.¹⁸ It seems very doubtful, however, that yields on Treasury bills and certificates can be raised very much above the levels attained by the autumn of 1948 without forcing the Federal Reserve to buy large quantities of long-term government bonds to prevent their yield from rising above $2\frac{1}{2}$ per cent. This is in line with Eccles' appraisal of the situation in April, 1948:

... Short-term rates probably cannot be raised much more without unsettling the $2\frac{1}{2}$ percent rate for long-term Treasury bonds.

When I say "cannot be raised much more," I am thinking in terms of an eighth of 1 per cent, to a maximum, say, of one-quarter. If you made the certificate rate $1\frac{1}{4}$ that would be raising it an eighth. If you raised it a full quarter, ultimately that would be $1\frac{3}{8}$. There may be, under certain conditions, a possibility of going as far as $1\frac{1}{2}$ in a short-term rate, but I certainly can't foresee that now.

101-2. Secretary of the Treasury Snyder stated, "I think we are definitely committed to a support of the $2\frac{1}{2}$ percent rate." See *Hearings Before the House Banking and Currency Committee on S. J. Res. 157*, August 4, 1948, p. 250.

Several specialists in the money market have pointed out to the writer that practically all the public statements of Federal Reserve officials have been to the effect that the long-term rate will not be allowed to rise above $2\frac{1}{2}$ per cent, not that the bonds will be supported at or above par. These observers believe that the distinction may be significant, for the Federal Reserve might contend that a bond price fractionally below par would still produce a yield of only "approximately $2\frac{1}{2}$ per cent."

¹⁶ *Hearings Before the Joint Committee on the Economic Report*, April 13, 1948, p. 16.

¹⁷ *Hearings Before the Joint Committee on the Economic Report*, May 12, 1948, p. 93.

¹⁸ *Hearings Before the House Banking and Currency Committee on S. J. Res. 157*, August 3, 1948, pp. 181-82.

Clearly you can't let the short-rate go up to a point where pressure on the long-term rates result, so you have to support the long-term market.¹⁹

Secretary Snyder had stated earlier that, "We feel there are very narrow limits in which you can consider increased interest rates."²⁰ Sproul, relying heavily on the argument that even the longest-term bonds are in effect demand obligations so long as their price is supported by the Federal Reserve, believes that there is somewhat more room to raise the short-term rates without upsetting the 2-1/2 per cent rate on the long-term obligations.²¹ But he would probably agree with Eccles that so long as the 2-1/2 per cent long-term rate is prevented from rising, short-term credit cannot be made expensive; it can only be made a little less cheap.

In summary, it appears that both Federal Reserve and Treasury officials have decided that for "the foreseeable future" they will not allow the yield on the longest-term governments to rise above 2-1/2 per cent and that yields on the shorter-term issues will not be allowed to rise to a point where they will endanger the stability of the long-term rate.

Federal Reserve and Treasury officials have offered many reasons for continuing to stabilize the yields on government securities at low levels despite the upward sweep of inflation. Among those most frequently advanced are the following: (1) Increased rates on the federal debt would add to the already large interest burden.²² They point out that with interest charges already amounting to about \$5 billion a year and averaging 2 per cent of the outstanding debt, every increase of one-half of a percentage point in the average rate would add about \$1.25 billion to federal interest costs. It is important to note here that the Treasury could follow either of two general lines of action if it were decided to terminate the policy of maintaining low interest rates. The first would be to refund at higher interest rates only the maturing debt, allowing the rest of the outstanding debt to decline in price. This would postpone the full increase of interest charges, but it would impose capital depreciation on banks, insurance companies, and other holders. The other line of action would be to refund the entire debt at whatever

¹⁹ *Hearings Before the Joint Committee on the Economic Report*, April 13, 1948, p. 18. Eccles later stated, "... so long as you hold the 2-1/2 per cent rate ... the range within which the short-term rate can rise would be within its present 1-7/8 and I would say possibly 1-1/2 per cent." *Hearings Before the House Banking and Currency Committee on S. J. Res. 157*, August 3, 1948, pp. 182-83.

²⁰ *Hearings Before the House Banking and Currency Committee*, November 25, 1947, p. 50.

²¹ *Hearings Before the Joint Committee on the Economic Report*, May 12, 1948, p. 93.

²² Board of Governors, *Annual Report*, 1945, pp. 5-6. *Hearings Before the House Banking and Currency Committee*, November 25, 1947, p. 50. *Hearings Before the Joint Committee on the Economics Report*, November 28, 1947, pp. 246-47.

rates of interest were required to prevent government securities from falling below par in the face of tightened credit conditions. Though this would protect holders against capital depreciation, it would immediately increase significantly the interest costs of the Treasury. Neither Federal Reserve nor Treasury officials seem willing to follow either course of action except to the limited extent of raising somewhat the shorter-term rates of interest. (2) Fluctuating prices and yields on governments would greatly complicate the Treasury's refunding operations—a serious matter with \$49 billion of the debt falling due within a year and nearly \$100 billion within five years.²³ (3) An increase of the yield on governments, which without an increase of coupon rates would mean a decline of their prices, would impose capital losses on financial institutions and other holders and might lead to panicky selling and loss of confidence in financial institutions.²⁴ Officials recall the drastic decline of bond prices in 1920 when the federal debt was only \$26 billion and point to the greater possibilities of panic now that the debt is ten times as large and represents about 60 per cent of all debt in the country. Eccles has stated that with the public debt as large as it is today a free market is out of the question if that is taken to mean an unmanaged, unsupported market. The real question cannot be whether yields shall be free or pegged; it must relate to the levels at which pegging will occur. "There is no natural level. . . ."²⁵ (4) A decline in the prices of marketable government securities might lead to wholesale redemptions of the nonmarketable savings bonds, which are in effect demand obligations. (5) A moderate rise of the yields on government securities would not be effective as an anti-inflation measure.²⁶ Federal Reserve officials have argued that a rise of rates so small that it would not greatly increase interest costs to the Treasury or cause serious capital losses to holders of bonds would not be a strongly restraining factor. (6) Low interest rates and generally easy credit eased the process of reconversion and will help to maintain high levels of employment and production.²⁷ As late as May, 1948 Sproul contended that allowing long-term governments to decline more than

²³ See Eccles' statement in *Hearings Before the House Banking and Currency Committee on S. J. Res. 157*, August 3, 1948, p. 183.

²⁴ Board of Governors, *Annual Report*, 1945, p. 7. *Federal Reserve Bulletin*, January, 1948, p. 11. *Hearings Before the Joint Committee on the Economic Report*, November 25, 1947, p. 140. *Hearings Before the Joint Committee on the Economic Report*, December 10, 1947, p. 620. *Hearings Before the Joint Committee on the Economic Report*, May 12, 1948, pp. 101-2.

²⁵ *Federal Reserve Bulletin*, November, 1946, pp. 1231-32.

²⁶ *Federal Reserve Bulletin*, January, 1948, pp. 15-16. *Hearings Before the Joint Committee on the Economic Report*, November 25, 1947, p. 139.

²⁷ Secretary of the Treasury, *Annual Report*, 1946, p. 3.

fractionally below par would interfere with private flotations of loans and might have deleterious effects on production and employment.²⁸

Effects on the Functioning of the Economy

If, as seems likely but not certain, the Federal Reserve continues to stabilize the yields on government securities at low levels, refusing to let the longest-term rates rise above 2-1/2 per cent and limiting the rise of short-term rates to levels consistent with the longest-term rate, what effects will this have on the operation of the economy? The most obvious effect, of course, is to hold down interest charges on the federal debt, thereby limiting the amount of taxes that must be collected for this purpose, and to protect holders of government securities from capital losses in terms of money, though not in terms of purchasing power. These results are far from insignificant. But much more important, I believe, are the effects on monetary policy, the behavior of the money supply, and the cost and availability of funds for private investment and consumption purposes.

With the adoption of this policy, the functioning of the Federal Reserve has been radically altered. This is most apparent in the case of open-market operations. Traditionally, this was the one instrument over which the Federal Reserve had complete and accurate control; the System could buy or sell precisely that amount of securities which it considered appropriate in light of existing and prospective economic conditions. But under its present policy of stabilizing government prices according to a selected pattern it has lost almost completely its initiative and its accuracy of control over its holdings of governments. It must as residual buyer purchase all the governments that others are unwilling to hold at the selected pattern of support prices. It must (1) purchase them not only from commercial banks but also from all other types of holders, and (2) purchase them regardless of the purposes for which the sellers will use the money. These two points are so important that they will be developed further.

In the past it has ordinarily been expected that the Federal Reserve would affect the supply of money and loanable funds primarily through the commercial banking system. It was a system of "bankers' banks"; it lent primarily to commercial banks, and even its open-market operations were undertaken primarily to affect the volume of commercial bank reserves and lending power. But with this new policy of supporting the prices of governments regardless of the type of institution or person selling them, access to Federal Reserve credit is no longer limited to commercial banks, but also extends to savings banks, in-

²⁸ *Hearings Before the Joint Committee on the Economic Report*, May 12, 1948, pp. 101-2. See also his testimony on pp. 94-95.

insurance companies, many other types of financial institutions, nonfinancial corporations, and individuals. This might not have been an important change prior to 1933 when the federal debt was small, but as Table I suggests, it is of the greatest importance when the federal debt held outside the government and the Federal Reserve amounts to nearly \$200 billion and that held by nonbank investors amounts to more than \$130 billion. So long as the Federal Reserve follows its present policy all these institutions and persons are in a position to secure at their option very large amounts of additional

TABLE I.—HOLDINGS OF UNITED STATES GOVERNMENT SECURITIES,
DIRECT AND FULLY GUARANTEED*

(In billions of dollars)

Type of Holder	Holdings as of March 31, 1948	Holdings as of June 30, 1948	Increase from June 30, 1940 to March 31, 1948	Holdings on March 31, 1948 as a Percentage of Hold- ings on June 30, 1940
Commercial banks	\$65.4	\$16.1	\$49.3	406
Mutual savings banks	12.1	3.1	9.0	390
Insurance companies	23.8	6.5	17.3	366
Other corporations and associations	21.8	2.5	19.3	872
State and local governments	7.5	0.4	7.1	1875
Individuals	66.8	10.3	56.5	649
Total held outside the Federal Reserve and U. S. Government agencies and trust funds	197.4	38.9	158.5	507

* *Federal Reserve Bulletin*, June, 1948, p. 700. This table includes not only marketable government issues that are directly supported, but also nonmarketable issues—principally savings bonds—which are not directly supported by the Federal Reserve. Even these, however, are indirectly supported, for the Treasury must redeem them on demand and—to the extent that its surplus and sales of nonmarketable issues are inadequate—refund them with marketable issues which are supported by the Federal Reserve.

money by selling their governments to the Reserve Banks at the support prices. And the decision as to the amount of new money to be issued in this way lies with the holders of securities, not with the Federal Reserve. The cost of this money is, of course, the yield sacrificed on the securities sold; it is an "opportunity cost." Thus, when the Federal Reserve changes the yield pattern on governments, it is in effect changing the cost of money to sellers of the securities.

Moreover, in pursuing its present policy the Federal Reserve cannot

refuse to buy and monetize governments even if it is disapproves of the purpose for which the new money will be used. Holders may exchange their securities for money to be used for (1) consumption, (2) purchase or construction of capital goods, (3) repayment of debt, (4) purchase of other securities, new or old, or (5) increase of idle balances. The Federal Reserve is powerless to prevent monetization of the government debt at the selected pattern of interest rates even if the new money is used directly to inflate spendings for consumption or capital goods or is used to supply liberal low-cost loans for these purposes.

In short, we are now on what may be called a "low-yield government security standard," for the Federal Reserve stands ready to monetize all the debt that others are unwilling to hold at the selected pattern of yields. And the commercial banks can, of course, expand their credit by a multiple of any new reserves furnished to them by this process, just as they can in response to increases of the monetary gold stock.

This new policy has made Federal Reserve discount rates practically ineffective as they are raised above the level of the lowest yields on government securities held by member banks. For example, in mid-1946 the Reserve Banks discontinued the $\frac{1}{2}$ of 1 per cent preferential discount rate, so that their 1 per cent discount rate was the lowest one remaining. This had practically no effect on the credit situation, for commercial banks were holding more than \$1 billion of Treasury bills on which the yield was only 0.375 per cent, and about \$14 billion of other governments maturing within a year on which the highest yield was 0.875 per cent. The discount rate increases to $1-\frac{1}{4}$ per cent in January, 1948 and to $1-\frac{1}{2}$ per cent in August, 1948 were largely ineffective for similar reasons. In the autumn of that year banks held well over \$20 billion of governments maturing within a year and carrying a maximum yield of $1-\frac{1}{4}$ per cent. Thus, discount rates below the yields on governments may tend to ease credit, but rates above the yields on governments which banks can sell freely to the Federal Reserve are likely to be largely meaningless. Even the "psychological effects" of rate advances above the yields on governments are likely to be insignificant when banks are largely out of debt to the Reserve Banks and know that they can remain so by selling governments at their own option.

Similarly, increases of Federal Reserve buying rates on acceptances are largely ineffective above the yield level on Treasury bills. Banks needing funds will sell Treasury bills rather than acceptances to secure needed funds, and they will shift from bills to acceptances whenever yields on acceptances rise significantly above the Treasury bill rate. The acceptance rate will continue to be of little importance,

however, so long as the volume of outstanding acceptances remains at a low level.

The Reserve System can still use "moral suasion," but this instrument, too, is seriously weakened by the fact that member banks are practically out of debt to the Reserve Banks and know that they can remain so while they have so many governments that they can sell to the Federal Reserve.

Even the efficacy of increasing member bank reserve requirements is seriously reduced by the Federal Reserve policy of buying governments freely at the sellers' option. By mid-1948 the Board of Governors had already raised member bank reserve requirements to almost the limit of their statutory authority; there remained only the power to raise requirements against demand deposits in central reserve cities from 24 to 26 per cent. In August, however, Congress gave the Board power to raise reserve requirements by an additional 4 percentage points against demand deposits and $1\frac{1}{2}$ percentage points against time and savings deposits. By using these powers to the full, the Federal Reserve could add about \$3.5 billion to the volume of reserves required against existing deposits with member banks. But it is far from certain that such a policy would either force a reduction of bank credit or curtail a rise, for member banks can easily replenish their reserves by selling some of their governments—of which they hold more than \$55 billion—to the Reserve Banks. An increase of reserve requirements can retard the expansion of bank credit for private purposes only to the extent that banks are reluctant to reduce their holdings of governments in order to acquire other assets. This point will be discussed more fully in a later section.

The Federal Reserve support program also alters the relationship of the Treasury to monetary controls. In the first place, the Treasury determines the coupon rates to be borne by its issues, so that while the Federal Reserve is committed to supporting governments at or near par the Treasury also determines within narrow limits the pattern of market yields. At times the Treasury has followed the advice of Federal Reserve officials, but at other times it has refused to do so and has insisted on maintaining lower interest rates than the Federal Reserve desired. Rumor has it that the Federal Reserve tried unsuccessfully during the war period to get the Treasury to raise yields on its shortest-term issues, and Eccles has testified that just after the war and again in early 1948 the Treasury refused to follow Federal Reserve recommendations that short-term rates be increased.²⁹ In the

²⁹ *Hearings Before the House Banking and Currency Committee on S. J. Res. 157, August 3, 1948, pp. 187-88.*

second place, the Treasury's taxation-spending policies affect the behavior of the money supply even while the Federal Reserve maintains a fixed yield pattern on governments. A fiscal policy that raises the propensity to save out of a given level of national income or that reduces the expected profitability of new investment tends to reduce the demand for bank credit and the creation of new money, while a fiscal policy that induces less national savings or that inhibits investment spendings less tends to increase the volume of new money created by the banking system. In the third place, the willingness of the Federal Reserve to buy governments at the sellers' option reduces greatly the anti-inflationary effect of Treasury redemptions of securities held by the Federal Reserve and commercial banks. When banks lose reserves as a result of Treasury retirement of Federal Reserve holdings, they can easily repair their reserve position by selling securities out of their own portfolios to the Reserve Banks. For example, it is estimated that during the first half of 1948 the Treasury retired \$4 billion of securities held by the Federal Reserve. This tended, in the first instance, to reduce bank reserves, but during the same period the Federal Reserve was forced to restore \$2.8 billion to bank reserves by purchasing governments in the market.³⁰ Treasury retirements of debt held by the Federal Reserve can tighten credit only to the extent that banks are reluctant to sell governments in order to repair their reserve position and acquire other assets.

We come now to a crucial question: To what extent, if any, can credit for private investment and consumption purposes become more costly and less freely available so long as the Federal Reserve continues its readiness to monetize the government debt at low interest rates and the entire community retains its freedom to shift funds at will among the various branches of the long- and short-term money market? Would even a further rise of the demand for loan funds and/or a further decline of the propensity to save tighten credit for private purposes? My judgment is (1) that the cost of private credit can rise in a roughly parallel manner to the increases in yields on governments produced by changes in Federal Reserve support levels, but

³⁰ This does not pretend to be a complete discussion of the effects of fiscal policy. Its purpose is merely to point out that with everyone free to sell securities to the Federal Reserve, the use to which the Treasury applies its surplus revenues is less important than it would be if banks and others did not have access to the Reserve Banks at their own option. A full discussion of the subject would have to discuss separately (1) the effects on private consumption, saving and investment resulting from collecting taxes in excess of government spendings, and (2) the effects of using the surplus (a) to build up Treasury balances in its own vaults, at the Federal Reserve, or at commercial banks, (b) to retire Federal Reserve-held debt, (c) to retire commercial bank held debt, and (d) to retire debt held by others.

(2) so long as "prosperity" continues, the cost of private credit cannot rise much *relative to* the yield on governments, and the availability of credit for private purposes cannot be lessened very much.

These conclusions are based on two general considerations: (1) The Federal Reserve maintains its yield pattern on governments at any given time by standing ready to issue money (and reserves to banks) in exchange for any government securities that others are not willing to hold at the pattern of yields. (2) All holders—institutional and individual—retain their freedom to shift their funds at will between government securities and all other types of assets in such a way as to equalize the marginal attractiveness of all types of assets. The differences that have prevailed between yields on various governments and other securities presumably measure the marginal estimate of differences in risk and liquidity. Several factors could permit yields on private securities to rise relative to those on governments: (1) A rise of the estimated risk and illiquidity of private securities relative to governments. This is not likely to be important while the inflation continues. (2) Inertia. Having already made up their portfolios, some investors may be slow to sell governments in order to purchase private securities whose yields have risen. (3) Specialization of financial institutions and individual investors. Since some investors specialize in holding certain types of securities, their funds do not flow freely into other branches of the money market. (4) Policies of "balanced portfolios" and diversification of types and maturities held. Strongly imbued with these ideas, many investors may hesitate to upset what they consider to be a balanced portfolio in order to shift to other securities. Commercial banks, with their present low ratio of capital accounts to total assets, may in some cases be reluctant to load themselves heavily with risky obligations. All these factors contribute to the immobility of funds among the various branches of the money market and might permit some tightening of credit for private purposes while yields on governments are held constant. The Federal Reserve was apparently relying largely on these "frictions" when it expressed hope that by increasing member bank reserve requirements it could tighten private credit somewhat without a significant rise in the yields on governments. But it is easy to overestimate the immobility of credit.

Several developments since the prewar period may have increased the mobility of funds from government securities into other branches of the money market. Among these are: (1) The large volume of government securities held by institutional and other investors. As mentioned earlier, investors in this country hold nearly \$200 billion of federal securities, an amount considerably in excess of all other outstanding debt obligations and equal to many times the annual net

increase of private debt. Even if the flow of current savings were very small and the demand for funds very high, investors as a group would have to sell only a small percentage of their governments to be able to absorb all new private issues during any year. The importance of this point is magnified by the fact that every net sale of governments to the Federal Reserve, whether by banks or others, adds an equivalent amount to member bank reserves and permits a multiple expansion of commercial bank loans and investments. (2) The widespread ownership of government securities. If most of the outstanding governments were owned by only a few types of financial institutions specializing in a few types of private credit, the mobility of funds out of governments and into the other branches of the money market might be quite restricted. But this is not the situation, as Table I shows. The mobility of credit would seem to be enhanced by the fact that virtually all types of institutional and individual investors who ordinarily lend in the various branches of the money market hold these large volumes of governments that they can sell to secure funds for lending. (3) The fact that investors' holdings of governments are so much larger, as a proportion of total assets as well as in absolute amounts, than they were in the prewar period. For example, government securities as a percentage of their total assets increased between 1939 and 1948 from 30 per cent to 62 per cent in mutual savings banks, from 40 per cent to 70 per cent in commercial banks, and from 27 per cent to nearly 50 per cent in life insurance companies. This tremendous growth in their government holdings—which in many cases occurred largely because of the scarcity of other debt obligations—should make for an increased willingness to shift out of governments and into other type of securities, for investors are likely to feel that they are now overly safe, overly liquid, and too dependent on government obligations.

We conclude, therefore, that though the immobility of credit among the various branches of the money market will probably permit some rise in the cost and some decrease in the availability of credit for private purposes even while yields on governments are pegged at a given level, credit is nevertheless a highly mobile commodity. Though its direct objective is to control yields on government securities, the Federal Reserve is effectively controlling, though less precisely, yields on outstanding and new issues of private debt obligations. It was, I believe, the late Lord Keynes who once bemoaned the fact that central banks, operating largely through discount rates and open-market operations designed to regulate the volume of commercial bank reserves, were unable to control with any accuracy long-term interest rates. He could not make such a complaint in the United States today, but he might not be happy to know that the Federal Reserve is using

this newly developed power to hold interest rates at low levels and to assure the easy availability of investible funds despite the onrush of inflation.

It is beyond the scope of this article to assess quantitatively the contribution that our low-interest, easy-money policy has made to the height and duration of inflation. Such an attempt would require, among other things, an estimate of the interest elasticity of private saving, private investment, and hoarding. A few relevant observations will, however, be made.

In the first place, the continued assurance of a liberal supply of loanable funds and money at low rates of interest which are kept stable or allowed to rise only within a very narrow range cannot fail to be an unstabilizing factor in an economy in which expectations concerning the marginal efficiency of capital fluctuate widely relative to the propensity to save. Such a policy is, of course, appropriate to a period when the marginal efficiency of capital is so low relative to the propensity to save that investment and saving are equalized at a level of national income so low as to produce widespread unemployment. But it is not appropriate to a period in which the marginal efficiency of capital is so high relative to the propensity to save that saving and investment can be equalized only at progressively higher inflationary levels of national income. To assure a liberal supply of credit at low interest rates in such a period is to say, in effect, that the inflation shall not be hindered by any increase in the cost or decrease in the availability of investible funds; despite any rise in the propensity to consume, despite any increase in public and private demands for funds for investment spendings, despite any increase in the demand for money for transactions purposes as price levels rise, the Federal Reserve stands ready to assure an ample supply of low-cost money by issuing new money itself and by providing commercial banks with additional reserves to support new monetary issues by them. The rate of investment spendings need not be limited to the amounts the community is willing to save out of a given level of national money income, for the Federal Reserve must under its present policy create, or provide reserves to permit the creation of, enough new money to meet the surplus demand.

Such a policy seems beautifully designed to sustain continued inflation in an economy in which all the major groups—workers, farmers, and business enterprises—attempt to maintain their real purchasing power at levels exceeding the available supply of goods and services by demanding increases of their money incomes to offset, or more than offset, each rise of prices. Economists have generally condemned as unstabilizing in its effects the Federal Reserve policy, enunciated in

the early nineteen-twenties, of "accommodating industry, agriculture, and commerce" at relatively stable rates of interest. But the present Federal Reserve policy of stabilizing yields on government securities at low levels produces comparable results. With demand uncontrolled, the Federal Reserve can stabilize interest rates at low levels only at the cost of losing control over the money supply.

In the second place, I believe that the inflationary contribution of the present Federal Reserve policy is underestimated by those who concentrate their attention on interest rates rather than on the supply and availability of investible funds. Some appear to contend that low interest rates do not make much of a contribution to inflation, for they do not increase very much either the propensity to consume or the inducement to invest. I believe that this analysis is not correct. It seems to assume that the market for investible funds is perfectly competitive, with the supply of investible funds being rationed solely through increases and decreases of interest rates which are highly sensitive. It would be more realistic to recognize that many interest rates are relatively sluggish and that much of the rationing of credit is effected by non-price methods, such as the lender talking the borrower into taking a smaller or larger amount of credit than he asked for, the lender regretfully informing the borrower, "Sorry, but I'm loaned up," tightening or relaxing standards of creditworthiness, refusal to underwrite a new security issue because "the present market is too tight," and so on. A tight money policy by the Federal Reserve can have a much more restrictive effect on private investment and on consumer borrowing than would be expected from a somewhat sluggish upward movement of the interest rate structure as the supply of investible funds is restricted. Conversely, the present easy money policy of the Federal Reserve probably enhances inflation more by assuring a highly ample supply and availability of loan funds than by maintaining interest rates at low depression levels.

Conclusions

Without attempting a full analysis of our war finance program, I should like to conclude with a few comments on the Federal Reserve's support program since the end of the war. In the first place, it is impossible to evaluate Federal Reserve policy without considering as well the attitudes and policies of the Treasury and Congress. Federal Reserve officials probably share the general fear of initiating policies that might prove to be too restrictive and that might precipitate the economy into deflation, but they seem to have less of a bias toward liberal credit than do the Treasury and Congress. The Treasury has displayed an understandable but probably not justifiable determina-

tion to hold down interest costs on the federal debt, and Congress has both feared that "prosperity" would be brought to an end and refused to use its taxation-spending powers to halt the inflation. So long as fiscal policy plays such an important role in our economy and is so closely related to the functioning of the monetary system, it is probably to be expected that Federal Reserve authorities will try to cooperate with fiscal authorities and will be influenced by the attitudes of the executive and legislative departments. Most economists favor a coordination of fiscal and monetary policies, but they should recognize that recent experience emphasizes the difficulties of securing such coordination on a satisfactory basis. If Federal Reserve and fiscal authorities disagree, should the Federal Reserve insist on taking actions that would embarrass the fiscal authorities? Should the Treasury have veto or directive power over the Federal Reserve, or should the Federal Reserve have control over certain Treasury actions, such as determining interest rates on the federal debt? Should we establish an agency to coordinate fiscal and monetary policies? How can fiscal authorities be induced to pay more attention to the broad economic effects of their policies? To at least some extent, the unsatisfactory nature of our fiscal-monetary policy since the end of the war must be laid to the unsatisfactory division of authority between the Federal Reserve and those responsible for fiscal policy.

In the second place, it is important to distinguish between a policy of maintaining a rigid pattern of yields on government securities and a policy of merely maintaining an orderly market for governments. As pointed out earlier, a policy of maintaining a rigid yield pattern or of holding the fluctuations of yields within narrow limits is likely to be incompatible with the maintenance of economic stability, for the central bank can achieve stability of interest rates only by surrendering its control over the money supply. On the other hand, the maintenance of an orderly market in governments need not conflict with the objective of promoting economic stability if this is interpreted to mean that the Federal Reserve should buy and sell securities in such a way as to promote orderly adjustments of security prices and yields. For example, under such a policy the Federal Reserve might sell securities, or at least curtail its purchases, in order to establish higher yields but still prevent "disorderly" movements. Such a policy would be difficult to administer, however, and the Federal Reserve would have to choose between accuracy of its control over yield levels and accuracy of its control over the money supply.

In the third place, it is not at all clear just why Federal Reserve and Treasury officials have continued since the end of the war to peg yields on governments at low levels. Some of the frequently offered

justifications were given in an earlier section, but they may be rationalizations rather than motivating reasons. These seem to boil down to three principal arguments: (1) Higher interest rates would increase costs to the Treasury, (2) Higher yields without higher coupon rates would impose capital depreciation on institutional and individual holders of the government debt, and (3) Higher yield levels or the uncertainty attending the upward movement of yields, would increase the difficulty of private financing and might initiate a business recession. These arguments are of varying weight and may indicate differing policy decisions.

The argument that yields should be pegged at low levels to keep down the cost of government is unconvincing, even if all outstanding governments were immediately refunded at higher interest rates so that the full burden of increased interest costs would be felt at once.

(a) It does not follow that minimizing interest costs tends to keep down the total cost of government. With interest costs making up only about one-eighth of the total costs of the federal government, total governmental costs may actually be increased if the low-interest policy enhances inflation significantly. (b) If it is felt that higher interest rates would be an "unjust" enrichment of the rentier class, the problem should be attacked through taxation rather than general credit policy. (c) Even if low interest rates do decrease total governmental costs, the avoidance of increased taxes for this purpose is less important than the promotion of economic stability. Interest costs are transfer rather than exhaustive payments, and the shifts of income involved in paying them out of higher tax collections are presumably less arbitrary than the shifts of wealth and income induced by inflation.

Also unconvincing is the argument that yields on governments should be pegged at low levels to protect holders of government securities against capital losses. (a) It is not clear that buyers of marketable government securities may properly ask for protection against a depreciation of their securities in terms of money. (b) The policy of preventing securities from depreciating in terms of money has not protected bondholders against loss of purchasing power. Many holders of the federal debt would probably be injured less by a decline in the monetary value of their bonds than by the loss of purchasing power induced by the continuance of easy-money. In general, it seems unwise to employ general credit policy to protect bondholders against capital losses in terms of money if this enhances inflation and reduces the purchasing power of all groups with relatively fixed money incomes. (c) It is not necessary to peg yields at low levels to protect holders of governments against capital losses in terms of money; the alternative is to refund the outstanding governments by issuing new securities with

coupon rates high enough to enable the securities to sell at par value in the face of the tightened credit conditions imposed by the Federal Reserve in the pursuance of its function of general economic stabilization. I am not convinced that the government is under any moral obligation to protect the holders of its obligations against capital losses in terms of money, but if this is to be our national policy it should be accomplished through appropriate adjustments of coupon rates rather than by having the Federal Reserve relinquish its control over the money supply in order to maintain a pattern of interest rates established by the Treasury at some time in the past. Such a policy would require that coupon rates on federal obligations be changed from time to time, perhaps frequently, and would probably be criticized by the Treasury, Congress and perhaps some investors who are accustomed to dealing in the conventional types of government securities. But policy should recognize that stability of bond prices, stability of coupon rates, and the maintenance of effective control over the money supply will at times be incompatible with each other in our economy. In my opinion it is of first importance that the Federal Reserve regain its freedom to control the money supply in the interest of economic stabilization, so that either the stability of government bond prices or the stability of coupon rates on those bonds should be sacrificed.

The third argument for continuing an extremely easy money policy since the end of the war—that higher yields would increase the difficulty of private financing and might initiate a business recession—is also unconvincing. It does have the merit of dealing with the objective, economic stabilization, that should be the primary concern of a central bank, but I do not believe that this objective would have indicated the assurance of an unlimited supply of low-cost money during the postwar period, and I suspect that Federal Reserve officials would not have thought so either if they had not been swayed by considerations related to holding down interest costs to the Treasury and protecting holders of government securities against capital depreciation. The Federal Reserve frequently tightened credit to halt overexpansions before the Great Depression, and it must have recognized that the slowing down of inflation during the postwar period required some restriction of private investment spendings so long as the propensity to consume remained high and government spendings for domestic and foreign purposes continued to be large. It is true, of course, that general credit restrictions are difficult to administer with precision and that they may not merely halt inflation but also precipitate a decline, but it does not follow that during a period of a high propensity to consume, large government spendings, and a very high marginal efficiency of capital

it is necessary to assure an unlimited supply of low-cost funds in order to avoid a cumulative decline of economic activity.

The growth of the federal debt to \$250 billion so that it equals one and a half times all other outstanding debt obligations does represent a marked change in our financial structure and gives rise to difficult problems of debt management. Yields on governments will probably continue for some time to dominate yields on private obligations. This, however, is no valid argument for maintaining an unvarying interest rate structure. A monetary policy aimed at securing economic stability requires control of the volume of investible funds, and with a widely varying demand this will sometimes mean variable interest rates. If, as a matter of national policy, we decide to continue protecting holders of governments against capital losses in terms of money, we should do so by varying the amount of interest paid to them, not by having the Reserve Banks passively monetize all the federal debt offered to them at a virtually invariable structure of interest rates.

THE LAW AND ECONOMICS OF BASING POINTS: APPRAISAL AND PROPOSALS

By J. M. CLARK*

Introduction

A crucial step toward clarifying the present state of the law is to distinguish two central issues: that of the non-base mill charging "phantom freight," appearing most clearly when there is a single basing point; and that of freight absorption by base mills, which would appear in isolation if every mill were a base mill.¹ The glucose cases dealt with the first issue and explicitly reserved the second. The cement case was argued mainly on the second issue.

In the issue of the non-base mill, the writer has reservations as to the legal reasoning used to deal with it in the glucose cases, but agrees with the probable economic result, assuming that reasonable latitude is afforded for differences between different mill or base prices, and for competitive freight absorption. As to freight absorption, he dissents (as will appear) from the legal reasoning on which Mr. Justice Black chose to rest his interpretation of the Robinson-Patman Act in the cement case, and sees objections to the resulting situation. These include not only serious uncertainty as to what the law requires, but inherent difficulty of clarifying it in a way that would avoid dangers of unduly rigid interpretation and enforcement, bringing unforeseen consequences, and likely to entail costs out of proportion to probable benefits. Objections apply also to law-making power exercised by the Federal Trade Commission, without proper accountability for the risky legal and economic doctrines it is free to employ.

*The author's past connections with the basing point question (now all terminated) include participation in the NRA study of iron and steel basing point pricing. Subsequently, he was engaged with Professor A. R. Burns to make an impartial report on the pricing system in cement, final completion of which was forestalled by the Federal Trade Commission's complaint against the cement industry, after which he consulted with counsel for the Cement Institute. He is aware of no present obstacles to his speaking with complete freedom, as an unattached individual.

¹The reader should note that I speak of "phantom freight" only with reference to that charged by a non-base mill at points that are nearer to it, freightwise, than they are to the base that governs the delivered price. "Freight absorption," as here used, refers to a base mill, reaching out to sell in areas where the delivered price is governed by another base; and the first mill must accept a mill net less than its own base price in order to sell there. So used, the terms have unambiguous meaning. As sometimes used, the distinction becomes clouded, because base prices at different bases may or may not be equal, and a non-base mill may or may not be regarded as the limiting case of a base mill with a base price so high as to be inoperative.

But he is seriously concerned that something should be attempted to make competitive pressures on prices stronger than they are under full-dress basing point pricing, with the appurtenances that commonly go with it. Therefore, he would be opposed to new legislation that would legalize such pricing as it has existed in the past. Some modifying legislation may be called for; but it should be approached with great caution not to destroy power of regulation, finally achieved in this field. The need may depend on the success with which the difficulties of clarification are met.

What is happening has the effect of regulation of trade practices. I believe this is not incidental to conspiracy, as Commission representatives maintain; but that allegations of conspiracy, including collusion inferred from similar acts, are mainly enabling instruments to validate orders changing trade practices. But probably neither the Commission nor the industries affected are eager for the Commission to take over the full responsibility and authority of positive administrative control in this field. So the method remains a hybrid, of the baffling sort in which years are spent arguing everything about the case except the effects (legal and economic) of the order that will finally be issued. During the basic litigation, economic considerations are elbowed out or distorted by legalistic exigencies, both sides probably producing about equally bad or irrelevant or one-sided economics. Since serious and realistic consideration of the effects of an order cannot begin until after the order is issued, economic analysis is backward, though the heart of legality in these cases is economic. This is unfortunate, but it seems to be the way our present system works.²

The Glucose Cases and the Non-Base Mill

In the glucose cases, the legal reasoning by which the decisions are supported appears fairly distinct from the real economic reason why the cases were decided as they were, which is barely indicated but not explicitly formulated. In terms of their legal reasoning, these cases seem to outlaw the non-base mill for the future, condemning the mill that has made no attempt to set up a *bona fide* base price of its own. A possible exception is the case of a mill which has had a base price,

²From the above, it is evident that my views meet one test of objectivity—they will satisfy neither side. After the strong presentation of the anti-basing-point case by Professor Frank A. Fetter and Mr. Corwin D. Edwards (in this *Review*, December, 1948, pp. 815-42) there is room for a contribution that would do something to redress the balance. This, and an invitation from the editor of this *Review*, have tempted me to enter the discussion, contrary to my former intention to stay out. But my views clearly disqualify me from presenting the basing point side of the case. If I advertised to do so, or were so advertised by others, it would be a fraud on the industries involved. The only reason for dwelling on this is that I have been so advertised in the past, when my views were essentially the same as now.

but has become a non-base mill through a reduction of the base prices of surrounding mills, to a point at which the first mill's base price no longer makes the delivered price to any destination.

One dubious legal argument, peculiar to these cases, seems not necessary to the decision reached. The Corn Products case involved a company owning a base mill at Chicago and also a non-base mill at Kansas City. In this situation, there was no defense of the non-base mill's pricing as being made "in good faith to meet an equally low price of a competitor." in the Staley case, involving an independently owned mill at Decatur, Illinois, it was held that it could not take advantage of the same defense (hereinafter called the "good-faith defense") because the price structure it was meeting—that of the company owning mills at Chicago and Kansas City—had been shown to be illegally discriminatory. Thus the Decatur mill was held to be discriminating in favor of points nearer freightwise to Chicago than to Decatur, without benefit of the good-faith defense; though the price structure it was meeting was held to be discriminatory only against points nearer freightwise to Kansas City than to Chicago. On a large part of its sales, the Decatur mill was meeting prices quite properly based on Chicago. And once the Kansas City mill became a base, this particular defect in the Decatur mill's defense would be cured for the whole area.

What would remain would be, first, the holding that this defense is available only to a mill that has shown deference to the *prima facie* case against price discrimination by setting up some *bona fide* mill price of its own. Second, if it did that, its freedom to absorb freight would be subject to the interpretation of the cement case.

As distinct from this legalistic reasoning, the real economic basis for the decisions seems to be implicit in the Court's acceptance of the idea that customers near the non-base mill are deprived of those natural advantages of geographical location to which they are entitled. This expresses the common man's sense of equity in this matter, and it seems highly probable that it accounts for the tight or strained construction put on the statutory provisions the Court had to rule on. The implications are not spelled out, but are pregnant. They assert, on behalf of the customer located near an isolated producer, a right to price treatment better than the minimum which competition, necessarily competition of relatively distant rivals, would of itself enforce in his behalf. This customer is, to a limited extent, at the discretion of the limited or partial "natural monopoly of location" held by the producer who has no closely adjacent competitors. The doctrine of "natural geographical advantages" seems to assert, in effect, that this limited natural monopoly of location is, like other natural monopolies, affected with a public interest. This, in connection with the Robinson-Patman Act, affords a

basis for an unconditional requirement that there must be some *bona fide* and substantial area of uniform mill-net pricing (or possibly, as suggested above, there must at least *have been* such an area).

This implies a limitation on the freedom of the isolated mill to choose its mill price or base price. It is not to be presumed that it must equal the mill price or base price of any one of its competitors, despite implications that might be drawn from language in the glucose cases which makes discrimination begin at the midpoint, freightwise, between two producers. Compulsory flat equality of mill prices would be one way of stultifying competition, as no economist needs to be told who is familiar with oligopoly theory; and it is not proper to infer that the Court intended to require it. One producer must be free to reduce his mill price without knowing that all others are legally required to follow suit instantly, and it would seem that he must be free to raise it on the same conditions. But he cannot safely raise it so high, relative to his surrounding competitors, that it covers only a nominal area, and would therefore appear as an evasion of the rule in these cases. This leaves the maximum allowable mill price indefinite, but indicates the kind of considerations that will sway the Court in ruling on the point.

This theory of affectation with a public interest appears, in principle, defensible, but might point to an undesired kind of regulation. If the glucose cases stood alone, or if freight absorption (as distinct from phantom freight) were still freely possible, they might lead to an interesting and novel type of hybrid, quasi-public-utility maximum-price control, with cost figures presented to sustain the burden of proof that would lie against any base price so high as to cover a suspiciously small area, and thus to be open to the charge of evading the principle of the glucose cases. Instances are conceivable, though perhaps exceptional, in which an economically serviceable plant, in order to make a fair return, might need all the income it could get from a price structure that would come close to that of a non-base mill.

But if the effect of the cement case is to abolish freight absorption or reduce it to a more or less negligible role, that will automatically set a more effective limit on relatively high base prices; and the potential venture into direct base-price control will not materialise. The hard-pressed mill which needs a high base price, plus very extensive freight absorption, would be debarred from this way of meeting its difficulties. The long-run effect of the glucose cases, then, is dependent on that of the cement case.

Freight Absorption: the Cement Case and Its Interpretation

Six points, made against "systematic" freight absorption, may be distinguished. (1) On the facts of the case, it has been used as an instrument of collusive action impairing competition in price; and the instru-

ment, so abused, should be barred. (2) Collusive or coercive tactics have in fact been used to implement and police it. (3) It is of such nature that such tactics are required to maintain it in effect. (4) It is "inherently monopolistic." (5) It is discriminatory under Section 2 of the Robinson-Patman Act, and on the facts of the case, the burden of proof under the good-faith defense has not been sustained. (6) The good-faith defense is not available to any general practice, but merely to the meeting of "individual competitive situations." Points (1), (2), and (5) hinge on the facts of the particular case, but the others are general; and the state of the law depends on how far these general contentions have been sustained and are now the law of the land.

Charges under the Robinson-Patman Act are general in that they do not expressly require a showing of collusive action; and point (6), which Mr. Justice Black upheld in the cement case, is perhaps the most general of all. Chief Justice Stone, in the Staley case, had said: "But it does not follow that respondents may never absorb freight. . . ." Mr. Justice Black, in the cement case, does not quite reverse this, but transforms it into a finding that it does follow that respondents may not continuously absorb freight. He holds that the glucose cases decided that the good-faith defense was not available to any basing point system; a single producer loses its benefit if he absorbs freight "constantly," and all lose it if each makes *some* freight-absorbing sales, since that is "evidence of the employment of the multiple basing point system—as a practice rather than to meet 'individual competitive situations.' " This, he says, applies even if there is no phantom freight, only freight absorption.³

Thus he supports his holding that the glucose cases control the cement case, despite Chief Justice Stone's reservation. This seems an unwarranted extension of Chief Justice Stone's remark about emphasizing individual situations, which is already satisfied by requiring verification of the particular price that is being met.

The effect of this ruling hinges on whether it is conditioned on an independent finding of collusive action, or whether, as seems likely, it makes freight absorption, if prevalent to the degree described, *in itself* evidence of such constructive collusion or common following of a practice as would forfeit the benefit of the good-faith defense.⁴ In the latter case, we now have the spectacle, strange in American law, of the legality of A's act being at the mercy of what B may independently do;

³ Federal Trade Commission *vs.* Cement Institute *et al.*, October term, 1947, nos. 23-34, separate print, pp. 37-40.

⁴ While Section 2 of the Robinson-Patman Act is not contingent on collusion, collusion would naturally forfeit the good-faith defense; and the Commission so framed its cement order, which the Court is here upholding, as to apply only to common action.

and of a right, in theory equally available to all, not only emasculated by procedural obstacles, but legally voided if all take advantage of it, even to a limited extent, and with or without joint action.⁵ In that case, it is my layman's conviction that this is bad law, perhaps of the kind which hard cases proverbially make. There is ground for holding that, without common action, freight absorption would be less precise. No sound ground has been established for holding that it would not still be general.

This theory of inferred common action robs of meaning the position frequently expressed on behalf of the Commission, that freight absorption is not *per se* illegal, because the Commission has dismissed cases in which there was basing point pricing but no showing of collusion. The point is: was this dismissal a mere exercise of discretionary leniency in cases it could win if it chose, under the doctrine of the cement case? Legality is one thing and discretionary leniency another.

But there is one feature of the glucose cases that clearly does not carry over to the issue of freight absorption. Discrimination, to be illegal, must be calculated to injure competition. The kind of injury held to exist in the glucose cases was that suffered by a candy-maker who had to pay more for his glucose than his competitors, because he was far from a base mill, though near a non-base mill. It is the kind of injury that results from "phantom freight" and not from freight-absorption under a multiple-base system. For "phantom freight" directly affects the relative prices paid by different customers in competition with one another, and freight absorption does not. If freight absorption, as such, injures competition, the injury is of a totally different sort from that held to exist in the glucose cases. Therefore, the ruling of the cement case, under the Robinson-Patman Act, rested not only on the glucose cases but on an independent holding that freight absorption impairs competition between the sellers (as distinct from that between the customers) through the "matching of prices" which it brings about, when systematically practiced.

It is interesting that the company is wrong if it meets a competitor's actual, but discriminatory, price; and if it meets a calculated price of the sort the base mill could make without discriminating (base price plus freight), then it is wrong again unless it takes pains enough to verify whether this price actually exists. Between the two rulings, the good-faith defense seems to be squeezed fairly flat. Professor Fetter attempts to eliminate it completely, this being necessary to his contention that the law now requires uniform f.o.b. mill pricing; and two of

⁵ The analogy of obstructing traffic by standing on the sidewalk, of which the same thing is true, does not present comparable interests or exposures.

his positions do substantial violence to historical fact.⁶ He treats Section 2(b) of the Robinson-Patman Act as a new provision, and states that it was ingeniously devised and "smuggled into the bill," by or on behalf of the basing point interests. The fact is that this subsection was an amended version of a provision of the Clayton Act of 1914 (as Fetter had himself stated five pages earlier).⁷ And the nature of the amendment was to burden the former exemption with such heavy procedural obstacles as to make it of extremely doubtful effect. It makes "discrimination" *prima facie* unlawful, and this has been held to include freight absorption. Under the good-faith defense, it puts the burden of proof on the industry to rebut this *prima facie* presumption, including the burden of proving "good-faith," and it makes the burden more exacting by substituting "an equally low price of a competitor" for the more general phrase, "to meet competition." If counsel for basing point interests devised this amendment to increase the protection of his clients, his sanity should be inquired into. It was this "smuggled" amendment that facilitated the throwing-out of the good-faith defense in the cases under consideration.

Another erroneous statement of material bearing on this subject is in connection with Fetter's argument that the *prima facie* case against discrimination could not be rebutted (not even if the statute says it can) by showing that it was done "to meet an equally low price" previously made by a competitor, "for this is always the motive of discrimination."⁸ The fact is that it is not always the motive. In the period when the Clayton Act of 1914 was being debated, the kind of geographical price discrimination that was fresh in the public mind was the kind of predatory local price-cutting brought out in the Standard Oil case of 1911, through which independents were ruined by locally concentrated price-cutting that did not stop with meeting their prices, but was aggressive in setting prices below theirs, and which they could not meet. The imposing of "punitive bases," alleged in the cement case, is essentially similar, indicating that this issue is not exclusively ancient history. It is this kind of aggressive discrimination, not covered by the good-faith defense, which the clause was most clearly intended to prohibit.

⁶ I take this occasion to express publicly my sincere congratulations to Professor Fetter on what is in considerable part a well and valiantly earned personal triumph in an attack on a far-from-perfect condition. It has been a matter of personal regret that I was forced to disagree with so much of his argument and his concept of the desired remedy; mixed with intellectual enjoyment of a very pretty clash between incompatible concepts of method.

⁷ F. A. Fetter, "Exit Basing Point Pricing," *Am. Econ. Rev.*, Vol XXXVIII, No. 5, Dec., 1948, pp. 816, 821.

⁸ Fetter, *op. cit.*, p. 822.

It prohibited (predatory) beating of the other's price, and exempted meeting it. With only a procedural change in the statute, it is now construed to prohibit meeting (if sufficiently prevalent) while occasional beating of the other's price reduces the legal danger. What made the inversion? Simply the Commission's theory of what impairs competition, plus its theory of inferred common action. These theories make the law. Such latitude, alarming as it is to a lawyer, is needed, because impairment of competition cannot be defined by mechanical rules describing the form of a trade practice. But the process now in effect lacks essentials of "due process" appropriate to such powerful Commission law-making.

The issue is interestingly complicated by one further consideration. If, in this type of industry, there had been found leading cases—admittedly unlikely—in which producers generally and voluntarily followed uniform mill pricing, I am sure that the resulting division of selling areas among producers, plus sporadic high prices to buyers in scarcity areas, forced to import from a distance, would have led to complaints; and the authorities would, or could, have found that this price structure, and division of the field, could not be maintained without collusive action, the individual incentive to absorb freight being so strong. The moral is uncertain, but not wholly reassuring to those who are relying on uniform mill pricing as the one legally safe course. It merely ranks, along with deliberate diversity of pricing practice, as the most nearly safe course.

Freight Absorption: Mr. Edwards's Interpretation of the Effect of the Cement Decision

It seems that Mr. Edwards reflects more accurately than Professor Fetter the present state of the law, including its ambiguity and uncertainty. He sees, as still permissible, some undefined scope for freight absorption, much reduced and not "systematic" but capable of covering a "considerable number of instances," and not limited to "isolated and sporadic transactions" (despite the language of the cement decision). At the same time he admits that, for industries that have been following basing point pricing, any practice that would produce a similar result—as extensive freight absorption would do—is "hazardous," even if done without collusion. Yet Mr. Edwards states: "There is nothing but business policy to require these sellers—both those who are under orders by the Commission and those who are respondents in cases not yet decided—to adhere to a rigid f.o.b. mill pricing system." Is this a criticism or a warning? He is inviting the companies to incur admitted legal hazards to test the meaning of the law in what is likely to prove the expensive way, by absorbing freight until the Commission "cracks

down." Elsewhere, he has indicated that a producer is safer if he sometimes beats the other price, instead of meeting it, thus forfeiting the good-faith defense in the not-too-certain hope of meeting the Commission's alternative test, of not impairing competition.⁹

The discussion contains suggestions of two different, and to some extent incompatible, limitations on price-meeting (or matching). One results from the irregularity and uncertainty incident to abolishing freight-rate conversion books, and letting customers use their own truck and water transport.¹⁰ The other would result from limiting freight absorption to cases in which the seller has collected and preserved evidence verifying the price he is meeting, to meet the burden of proof under Section 2 (b). This would be practicable chiefly in cases where rail freight is used. In the other cases there would often be no knowable price to which the concession could be equated, so the good-faith defense would not be available. But that has nothing to do with whether they are cases in which freight absorption would be monopolistic; in fact, they include precisely the kinds of cases in which the Commission has been hoping to jar loose more active price competition by introducing irregularity or uncertainty as to what the competitor has to meet, and so making oligopoly less "perfect." The discriminator would have to trust that the Commission would hold that this kind of discrimination does not lessen or injure competition.

Another suggestion, growing out of Mr. Edwards' remarks on the present situation, is that freight absorption is permissible when it is a favor to a buyer who cannot get supplies from a nearby mill. That is, it is justified in cases in which the seller has no normal economic incentive to make the concession, because he can get the business without doing so. The suggestion that this situation might be met by sellers exchanging customers is rational, but collusive, hence would be done at the peril of antitrust action.

Another implication derivable from arguments used in the cases is that freight absorption is all right if only one producer does it, but becomes wrong if his competitors do the same thing in his territory, because then the discrimination becomes "mutual," and acquires a constructively collusive character. A final rule is purely quantitative: a little freight absorption is all right; but if it becomes widespread, it will be held to be "systematic" and therefore wrong. For this reason it seems clearly unsafe for a producer to absorb freight in all the cases in which verification of the competitor's price is feasible. I submit that these do not add up to a clarification of the distinction

⁹ In address before anti-trust section, New York Bar Association, January 26, 1949.

¹⁰ Section 2k of the Federal Trade Commission cement order seems aimed to protect diversion-in-transit, but is obscure, so long as delivered prices are permitted.

between competitive and non-competitive freight absorption: between the allowable and the legally dangerous.

Economic Effects: Lessening or Injuring Competition

In the construction of the law, the concept of "injury" to competition seems to have been used to refer to the competition between customers, while the concept of "lessening" refers to the competition between the sellers, though it is presumably an injurious lessening that is aimed at. This is a question of economics; but to discuss it rationally, it is necessary to get rid of some of the extreme or confused contentions used on both sides. On one side, is the confusion between action to maintain uniformity in methods of deriving delivered prices from base prices, and collusive fixing of base prices themselves; or the identification of "price-matching" with monopoly, by assumption. To assume—as is persistently done—that the two are identical or inseparable, forecloses the real economic question, of the effect of "systematic" freight absorption in a basing point setting, on the forces that play on the setting of base prices. On the other side, is the confusion involved in the contention that abolition of freight absorption would set up "local monopolies." This again forecloses the same real economic question of the effect on the competitive forces that play on prices; and also the same question with respect to "service." Under widespread meeting or "matching" of prices, competition in service is very active, perhaps overstimulated. Under uniform mill pricing, it would be active only at the borders of market areas, and the benefits might not spread to customers in the interiors of the market areas in the same way that price benefits would. So there is more ground for speaking of local monopolies in service than in price, as resulting from uniform mill pricing; and competition in service is not to be dismissed as necessarily unimportant. It is, of course, only part of the picture.

The real economic question may be approached *via* the much-used letter in which John Treanor stated, "that ours is an industry above all others that cannot stand free competition, that must systematically restrain competition or be ruined. . . ."¹¹ Edwards indicates the usual construction placed on this expression by using the word "avoid" in the next sentence as synonymous with "restrain." That was not Mr. Treanor's conception. The "restraint" he contemplated consisted simply of assuring such orderliness of pricing that a producer would know the price he had to meet. Lacking this, competition took on a character of piecemeal erosion, carrying prices to bankruptcy levels when capacity was excessive—as it was a large part of the time in such a fluctuating

¹¹ Edwards, *op. cit.*, p. 830.

industry as cement—and bankruptcy did not take the bankrupt capacity out of the industry, but left it as a chronic threat to standards. If he knew what he had to meet, he was willing to compete and be competed with, asking no further “restraint”; and he conceived this as fair competition.¹²

Economists will, of course, point out, correctly, that this describes a condition bringing into play the “oligopoly” principle whereby price reductions are deterred by the certainty that they will be met; and a good many of them will further hold, incorrectly, that in this case price tends in practice to a level identical with that of monopoly. This is one more instance in which neither side is unqualifiedly right. Mr. Treanor’s view was one-sided or incomplete in accepting oligopoly as equivalent to healthy competition; his opponents are one-sided in ignoring the reality of the threat of “cutthroat competition” which concerned him, and in assuming the identity of oligopoly with monopoly.

Agreements fixing prices are not the real issue; they are equally illegal under any form of pricing structure. An order to change the form of pricing structure would not prevent such agreements. But it might alter the degree of competitive pressure exerted on producers who are setting their prices without agreeing on them. And it forecloses part of the economic inquiry if one assumes at the start that any mitigation, from the most extreme degree of pressure possible, is necessarily injurious and illegal.

One might start such a comparison of different forms of pricing by assuming half a dozen or more producers, all located at the same point of origin. They will meet one another’s prices. Barring a quite limited amount of (temporarily) secret “chiseling,” any producer reducing his price will expect it to be met, down to something close to his rivals’ marginal costs (which are less than average costs) but a price increase is not sure to be met. The upshot is that the competitive incentive to reduce prices stops at something that may be called a quasi-monopoly level; but there is no dependable mechanism for raising them if they get below this level, as they might through rising costs or otherwise. So they are likely to be sticky at some indeterminate point which may be lower, but not higher, than the theoretical quasi-monopoly level. This, in turn, may approach either the competitive or the monopoly

¹² This letter, be it noted, was written under NRA, when the official theory was that competition was “injured” when it became destructively severe, and that approved codes of fair competition were exempt from anti-trust laws. The *ex post facto* disregarding of this exemption, illustrated by the use made of this letter as evidence, has backfired, as will be seen, stultifying trade-practice conference procedure.

level.¹³ One important mitigating factor arises from the widespread practice of unpublicized shading of openly quoted prices, which may be tolerated within limits, or may ultimately be regularized by a formal price reduction. This price-shading may involve discrimination, especially in favor of large and powerful customers, and therefore may incur legal danger; but if it is not too narrowly confined in this way, it may be the most active channel of price competition.

This may be taken as the type of the oligopoly situation pertinent to this class of industries. It is sheltered from tendencies to cutthroat competition by the foreknowledge that price reductions will be met, and this shelter is not guaranteed to stop at an economically correct price; but it is less powerful than monopoly, and has nothing inherently illegal about it. Now suppose these producers to be spatially separated, each with a base price which he is free to raise or lower, and each free to absorb freight. This creates another variant of the oligopoly situation. Is it closer to monopoly, or farther from it, than the first? The answer seems to be that it is closer in some respects and farther away in others. It is closer in that, if one producer raises his base price, the resulting increased delivered prices will be met by most of the competitors making freight-absorbing sales in the area where his base controls the delivered price. (They will be met, except for price-shading or "chiselling".) It is probably closer in that the producer whose preferred price is the lowest is not in a position to set a ceiling on the base prices of his competitors; each is more nearly free to follow his own bent in this respect. But the situation is farther from monopoly in that a reduced base price may discourage some of the more distant competitors from selling in those parts of the first mill's selling area where heavy freight absorption would be required.

In theoretical terms, this represents an individual demand schedule flatter than the general industry schedule, but still with considerable

¹³For this purpose the "quasi-monopoly" level could most pertinently be defined as the maximum profit level as seen by and for one producer who expects to keep about his existing share of total sales in the industry. This would differ from producer to producer, according to their costs, and more particularly according to the long-run or short-run perspective in which they view the effect of price on sales for the industry, and on the likelihood of attracting new capacity into the industry, and thus reducing the "shares" (no agreement on quotas implied) of the existing producers. The longer the perspective envisioned, the closer the result comes to the price of theoretical competition. Also, one producer may hope to gain "good-will," or a large long-term contract by initiating a reduction, even if met. The price for the group will be determined by the producer whose circumstances and perspective lead him to set the lowest "quasi-monopoly price." He will veto an increase above this level by refusing to follow it. Even below this, an increase initiated by one producer may not be followed by the others. The rationale of meeting an increase may be a case to which the Neumann-Morgenstern chess-game method of analysis is pertinent.

slope (slope defined as ratio of change in one producer's base price to change in his physical volume of sales—both measured percentage-wise—other producers' base prices being unchanged). But in this kind of case, a horizontal or near-horizontal individual demand curve brings about the oligopoly effect, because producers know, or soon find out, that a price reduction will be met. A rational economic objective could be theoretically defined as an individual demand curve with a slope such that the price yielding maximum profit above short-run marginal cost would be approximately sufficient to cover total cost, on the average of fluctuations.¹⁴

There is bound to be a zone of uncertainty and resulting indeterminateness, and *this zone is essential to avoiding a dilemma inherent in this situation*. Without it, if price were above the equilibrium-level, there is no dependable incentive to reduce it, since a reduction is sure to be met. In a theoretical model of this sort, active price competition can go on when price is between the upper limit, where a reduction is sure to be met, and the lower limit where a reduction would be unprofitable, even if not met. The economically desirable range of slopes of the individual demand curves of the different producers is one such that the zone of uncertainty whether a price reduction be met, will extend up as far as prices are likely to go, and down as far as the desirable competitive level of price; because it is within this zone that competition acts effectively to reduce prices. This does not depend on whether the businessmen concerned analyse their actions in these theoretical terms—they obviously do not—the question is merely how they react to a rival's reduction of price. This formulation is suggested, not merely for its bearing on the basing point question, but as a general modification of the theory of oligopoly.

From this standpoint, we may look at uniform f.o.b. mill pricing to see what sort of slopes it is likely to give to individual demand curves and whether it is likely to approximate the economically desirable range. If so, it might utilize the spatial separations of the mills to bring about a more effective form of competition than would prevail if they were all at one location. That seems to be what Professor Fetter has been aiming at. A realistic answer to this question would involve an enormous amount of factual investigation, since it depends on the geographical distribution of demand. If demand is sparse in areas potentially accessible to more than one producer, the slope is

¹⁴ It is evident that the writer does not adhere to the theory that price should always be equal to short-run marginal cost. This is hardly the place to discuss that entire theory, which would require tax-subsidized deficits, and therefore is not an appropriate standard to introduce into anti-trust policy.

relatively steep. If, in such a potentially competitive area, there is a concentration of demand so great that several sellers find it necessary to secure a share of it, the decisive portion of the curve will be horizontal, each producer will know a price reduction will be met, and the oligopoly situation will result. The eastern coastal area has had this character for the potash industry, and it has been claimed that the Detroit market has the same character for some steel products, so that for these products "Detroit minus" would take the place of "Pittsburgh plus." If there are several such concentrations in debatable territory, the curves may be broken into horizontal stretches connected by sloping segments. And the curves of different producers will differ.

A simplified model, which might roughly approximate the average from which particular cases depart, could be constructed by assuming uniform distribution of demand in two-dimensional areas, disregarding possibility that price moves will be met, and making realistic assumptions as to the relation of transportation cost (or more strictly, added cost of added distance) to total cost, and of short-run marginal cost of production to total cost. Such a model, with figures pertinent to the cement industry, yields individual demand curves with slopes such that the competitive equilibrium price, while above short-run marginal cost, would be considerably below total cost.

This strongly suggests the further conclusion that, when prices are at or above total costs, producers would soon learn that any reduction would be met, and the stickiness characteristic of oligopoly would result. Then the hope of establishing more active price competition would be disappointed, possibly after a transition period of destructive price warfare during the first "buyers' market." This conclusion is supported by the fact that price-shading could not be concealed, except at points on the precise boundaries of the marketing areas of different producers; thus increasing the certainty that price reductions would be met. The chief qualification on this conclusion is the effect of changes taking place from season to season in the geographical distribution of demand, which might lead to fresh efforts to alter the boundaries of established selling areas from time to time. The effect of this seems conjectural.¹⁵ Equally conjectural is the expected stimulus to the setting-up of small independent plants, if they are deprived of the privilege of setting a high base price and absorbing freight,

¹⁵ A few of these practical considerations are listed, but not explored, in my article: "Imperfect Competition Theory and Basing-Point Problems," *Am. Econ. Rev.*, Vol. XXXIII, No. 2, (June, 1943), pp. 284, 295-96. This refers also to Smithies' "Aspects of the Basing-Point System," in this *Review*, Vol. XXXII, No. 4 (December, 1942), pp. 423-40.

in their early days. More likely is a stimulus to large companies to establish branch plants, and an advantage for existing chain mills.¹⁶

Cross-freighting of truly standardized products would be eliminated (except for cases of local shortage leading buyers to be willing to pay excess freight, as buyers are at present). As indicating the importance of this saving, Mr. Edwards suggests that the Federal Trade Commission in 1932 made an estimate of unnecessary freight for cement, and found it about 24 cents a barrel. This gives an exaggerated impression. Freight on the finished product is a larger element in final cost for cement than for steel or probably most other products, and freight absorption was substantially greater in 1932 than in years of more normal business. Furthermore, the Commission, instead of making an independent estimate of unnecessary haulage, accepted total freight absorption as a tentative indication. This cannot be assumed to be an accurate measure. The writer attempted to get a rough indication of the direction and amount by which it differs from the answer sought, by examining a considerable number of drastically simplified models illustrative of fairly typical situations, assuming mill prices that would either be based on assumed costs, or would give each producer his previous volume of sales (presumably no set of mill prices could do this precisely in practice, but there would be strong pressure in that direction). The tentative conclusion was that the available reduction of freight costs is substantially less than total freight absorption. If considerable freight absorption persists, this saving would be further reduced, as Edwards points out.

If individual demand curves (relative to base prices) are too steep under regular basing point pricing, and too flat under uniform f.o.b. mill pricing, that suggests the possibility that something intermediate might work better than either. In a simple theoretical model, the slopes could be altered as desired by allowing limited freight absorption. If Edwards is right about the results of existing rulings, the existing law would bring about an intermediate situation, but one with unpredictable effects. This intermediate character results, first, from truck and water haulage, and absence of freight-rate books, introducing greater uncertainty as to what a competitor has to meet; and second, from a reduced amount of freight absorption. As to the first, there seems to be no way of estimating its effect on competitive pressures. Industry's claim that it starts a sequence of price-nibbles, bound to end in bankruptcy, may be exaggerated; it leaves protection of the seller to his own individual good sense. As to the second, if freight absorption does materialize and is permitted, there is no way of estimat-

¹⁶ Opinions differ as to whether mere warehouses could legally be used to secure the same effect, distributing products produced in a single plant. Assembling or finishing plants would presumably be legal.

ing its probable or legally permissible amount; and the amount would be decisive in determining the effect on competitive pressures. Finally, between these two effects there is some incompatibility. The uncertainty-effect works most strongly if there is full interpenetration of selling areas. If there is none, this effect would operate only on the boundaries, and perhaps at too few points to be very effective. Strict uniform mill pricing would weaken the uncertainty-effect; it also interferes with itself, as we have seen. The result envisioned by Edwards—a moderate uncertainty-effect plus substantial, but limited, freight absorption—seems economically sound; but I see nothing in present rulings adapted to drawing lines in the economically useful places.

Conclusion: What to Do?

The Commission's victory has been so sweeping and sudden that it may not realize how great is its present power, after years of struggle and rebuff. It may not be appropriately prepared to exercise such great power, and hangovers from the period of struggle may plague it. The prosecuting arm used unsound economic theories in fighting its cases, making it hard to convince the skeptical that the Commission—not separable from its prosecuting arm—has the sound economic understanding which its present powers require. I believe it has sounder economic understanding than appeared in the concepts it used as weapons when it was throwing everything and the kitchen stove at the companies in a desperate battle to get a basis for any order that would stick. It is of incalculable importance that the quality of its real economic analysis be demonstrated. The Commission's theory of what impairs competition—which *is* the law—needs to be brought into the open. It also needs to be adapted to the new phase in which embattled absolutes may give way to a need for sensitive gauging of matters of degree. With orders in force, real economic discussion of their effect, formerly impossible, has become indispensable.

Risking dogmatism for the sake of brevity, I believe we should accept the fact that freight absorption is in a realm, the essence of which is regulation of trade practices rather than punishment for violations of specifically knowable law, and in which economic theories make the law. Regulation should remain flexible, ruling according to the essential effect rather than the specific form of practices and accepting the resulting uncertainty as to whether, for example, freight absorption is proper in a given setting. It should continue to tell business what not to do, rather than prescribe specifically what it shall do, and should seek procedures as equitable and serviceable as possible in these premises. This means shifting emphasis from collusion (real or inferred) to more realistic consideration of economic effects of practices and proposed remedies, recognizing them as matters of degree.

It may call for considerable change from past procedures.

Unless the country wants to restore unlimited freight absorption, we should go slow on substantive changes in the law. I believe it would be a mistake to introduce a statutory definition of "price," for the purpose of changing the present legal meaning of "discrimination in price." "Price" means *both mill-net and delivered price*, and both sides use it both ways, as the subject matter requires. It is the construction of the phrase, not the word, that counts; and the phrase has been construed, I believe, in accord with the intent of the original act of 1914, though the line of legality—a distinct question—has not. A statutory redefinition of "price" might protect predatory price cutting from the condemnation of Section 2. It would move litigation back to the stage in which economics is pushed aside by legalistic verbalisms—a stage from which we may hope to be rescued by the completion of the basic litigation. In that way it would be a move in the wrong direction.

There is more ground for relieving business of the burden of proof of "good faith" under Section 2 (b), and giving it the benefit of normal business judgment in meeting competitive prices. If occasionally beating a rival's price, rather than always meeting it, is included among types of approved conduct, the words "an equally low price of a competitor" should be changed to permit the approved practice. Sufficient remedies against predatory price cutting would remain.

But the principal changes should be procedural, recognizing that honest disagreement on economic theories should not convict anyone of illegal intent; and that penalties for violation of a Commission theory, not previously and clearly announced and upheld, are *ex post facto* and improper. A cease-and-desist order may amount to a penalty, heavier than a fine which would be regarded as "excessive." Such orders should follow procedures adapted to relieve their *ex post facto* character. The most logically appropriate procedure for making the law specific—the trade-practice conference—is probably useless, since there is too much likelihood that the necessary joint action could be used as evidence against the companies in later complaints, as things done and written under NRA were used. Hence the companies would not dare go beyond innocuous platitudes; and the Commission would be similarly chary for fear of impairing its future freedom to attack any practice.

I believe the most useful changes would be of the following sort. In a finding that an existing practice impairs competition, the Commission should be required to state its reasons for its finding, enunciating its theory of impairment, defined as making things worse than some alternative condition that could conceivably come about in the specific conditions of the industry in question. This should be done

in the complaint, making it arguable in the Commission proceedings as well as on appeal. This would exclude much of the economists' testimony taken in the cement case, and require testimony of a more relevant sort. As to the nature of the alternative condition, there is a dilemma: the most logical alternative is one that could come about spontaneously, but the most practically pertinent may be one that only a Commission order could bring about. I suggest that the prosecuting arm of the Commission have the option of using an alternative of the latter sort, which would then be arguable before the Commission itself, not binding the Commission, but giving it the benefit of the resulting argument in framing its final order. Findings based on this optional standard could not carry penal consequences.

Orders should be subject to a similar requirement of a showing of positive ground for believing that the order is adapted to improve the condition complained of. This is intended to add to the present requirement that the remedy should have some appropriate relation to the offense: a requirement suited to disciplinary action against known wrongful acts.

Such changed requirements should go into effect only after a waiting period, to allow the Commission time to develop and consider its theories, in the light of the responsibilities thus imposed. If the Commission realizes its present powers, and the responsibilities and changed equities that go with them, including the seriously demoralizing effects of its present relations to business, it should realize that changes of the general character proposed would put it in a sounder position and increase its moral authority. This would be in its own best interest.

Finally, these cases emphasize the need for availability of impartial *amicus curiae* testimony and expert advice, for both Commission and courts. If, as I believe, the Court has slipped at points into bad law in both the Staley and cement cases, it is because it had only partisan arguments to choose from. No theory of public interest was available from an impartial source; and it is too much to expect the Court, in such involved matters, to construct out of whole cloth its own fresh theory of public interest. This proposal might mean the growth of a new profession of legal-economic counsel, starting with the existing nucleus of personnel trained in both fields.

The issues are much broader than basing point problems. They concern the working-out of methods, consistent with American ideals of responsible government, for handling highly specialized and technically complex issues of regulation of trade practices. These threaten the essentials of democracy if they are not effectively regulated, and threaten them equally if regulation, to be effective, has to be freed from proper standards of accountability.

A NOTE ON PRICING IN MONOPOLY AND OLIGOPOLY

By JOE S. BAIN

The conventional versions of *a priori price* analysis apparently suggest that a single-firm monopoly or a collusive oligopoly will choose a price-output combination such as to maximize *the industry profit*.^{*} Product differentiation and selling cost being neglected, the currently established firm or firms are supposed to equate their marginal costs to the marginal revenue drawn from the industry demand curve for the commodity which they produce in common. This balance should presumably be struck over any long period between long-run marginal cost and the marginal revenue from the long-run industry demand, and in any short period between short-run marginal cost and the marginal revenue from the short-run industry demand. Price in either period should be set to maximize the difference between the aggregate revenue from the sale of the given commodity and the aggregate cost of its production by any established group of firms. Empirical studies of price policy by monopolists or by oligopolists with *apparently* effective collusion on price, however, frequently fail to sustain these predictions. In many such industries, short-run outputs at which short-run marginal costs plainly exceed short-run industry marginal revenue are apparently common. But more striking is the evidence in some of these industries of prices held persistently over many years within a range where the industry demand curve is evidently inelastic, the corresponding marginal revenue thus being negative and necessarily below long-run marginal cost.¹ This indicates a prolonged tendency (potentially for a theoretical "long-run") to hold price well below the level which would maximize the difference between aggregate revenue from the sale of the industry's commodity and the aggregate cost of producing it,² and apparently contradicts the basic *a priori* predictions of a theory of collusive pricing.

This apparent impasse has been variously resolved by students of industry with suggestions: (a) that sellers do not try to maximize monetary profit; (b) that they err in their attempt to maximize profits;

* The author is associate professor of economics at the University of California, Berkeley. He is indebted to Professors H. S. Ellis, W. Fellner, and R. A. Gordon for helpful criticism of the paper and for a number of substantive suggestions.

¹ Two fairly convincing examples of this are the cigarette and steel industries.

² Of producing it, explicitly, with the "given" number of firms, but also with any other conceivable number of firms if industry marginal revenue is negative.

(c) that in the face of great uncertainty concerning demand they simply add some markup to normal average cost and hope for the best; (d) that they fear government interference and public ill will if they exploit their monopoly positions fully; (e) that the apparently collusive oligopoly is not fully or successfully collusive, so that rivalry keeps price down; (f) that sellers set low prices for very considerable time periods in order to raise the level of future industry demand; and (g) that *established sellers* persistently or "in the long run" *forego prices high enough to maximize the industry profit* for fear of thereby attracting new entry to the industry and thus *reducing the demands for their outputs and their own profits*.

Although each of these explanations may contain an element of truth as applied to particular cases, they proceed on somewhat different levels in their implied criticisms of conventional theory. The rejection of profit-maximization as a goal suggests a corresponding rejection of conventional price theory; the thesis that either errors or uncertainties are dominant suggests that if such theory is basically valid in its assumptions it nevertheless has little genuine value for predicting actual price results. The suggestion that oligopolistic rivalry reduces prices below the monopoly level leaves theory unscathed, simply implying that the model for monopoly pricing has been misapplied. On the other hand, the hypotheses concerning fear of interference, threat of entry, and pricing to stimulate future demand do not deny that the observed results may be explicable in terms of a theory of monopoly or collusive oligopoly price which assumes profit maximization, effective collusion, and approximately given data, but suggest that the industry or seller demand curves employed in that theory must be redrawn to reflect explicitly the effects of the phenomena in question.

Until the results of such a redrafting are explored, we cannot properly assess the potential explanatory value of conventional price theory. In this paper, we examine two possible modifications of the theory of monopoly price, to take account first of the relation of present price to future profit and second of the impact of the threat of entry;³ in the latter case we suggest certain possibly novel conclusions concerning the unit for which profit may be maximized and the relation of marginal cost to marginal revenue.

Interperiod Demand Relationships

An elaboration of conventional theory to recognize the relation of current price to future demand has been suggested by M. W. Reder;

³ Although the threat of government interference will not be treated explicitly, it could be handled in about the same manner as entry.

it may deserve re-emphasis in connection with the present issue.⁴

The monopolistic firm (or group of collusive oligopolists⁵) may be provisionally viewed as dealing with an entire industry demand curve in a succession of time intervals, in each of which it can freely select a price-output combination for the industry. It will thus logically take account of the effect of any current price-output decision on the position of the industry demand curve in future periods. A lower price now may mean a larger (or smaller) demand later, and any such anticipated relationship should affect any current pricing policy. If it does, a single long-run industry demand curve cannot be viewed as an independent determinant even of the long-run tendency of price. Such a relation is then not given independently of the prices which the seller(s) charge at various times during the future, but will assume various levels according to the behavior of a series of short-run prices. Instead the seller(s) necessarily refer to a series of short-period demand curves for each of a succession of future intervals; these fully replace any long-run demand curve for the purposes of making all output adjustments. And we must now speak not of a single long-run tendency for price, but rather of a price-pattern through time.

A simple model can be constructed in which a single-firm monopolist is conceived of as pricing solely in a current Period I and a future Period II. There is an industry demand curve for each such period and a corresponding pair of marginal revenue curves. Monopoly price for the first period in isolation would be set to equate the marginal cost of that period to the marginal revenue of that period. But demand in Period II may be supposed to depend upon Period I price; for example, the Period II demand curve may shift outward as Period I price falls. Viewing this relation in prospect from the beginning of the first period, the monopolist may be supposed to adjust Period I price so as to allow maximization of the sum of the profits of the two periods. This procedure may result in setting Period I price below the level for which the marginal cost and marginal revenue of that period are equated, so long as the resulting decrement to Period I profits is more than offset by a resulting increment in Period II profits (as appropriately discounted for interest and risk).

Use of the demand-supply technique in such a sequence analysis permits precise formal treatment of the effects of anticipated relations between current price and future demand. To employ the analysis

⁴ "Intertemporal Relations of Demand and Supply within the Firm," *Canadian Jour. Econ. and Pol. Sci.* (Feb. 1941), pp. 25-38, and especially pp. 32-35.

⁵ For a simplified argument, we will suppose the collusive oligopoly in each case to be a "pure" oligopoly, in which the several firms sell identical products at a necessarily identical price (the possibility of discrimination being neglected).

for purposes of prediction, we should attempt to determine the sign and value of the cross-elasticity between Period I price and Period II quantity for the monopolist—

$$\frac{\partial q_{(t=2)}}{\partial p_{(t=1)}} \cdot \frac{p_{(t=1)}}{q_{(t=2)}}$$

One can identify actual cases where this elasticity might be alternatively positive or negative in sign, or zero. Where it is negative and significantly large, a current monopoly price below the current profit-maximizing level can be formally explained; where it is positive and large, current prices above this level could be predicted. This model of course does not have the monopolist doing other than to maximize the "long-run" difference between aggregate industry revenue and aggregate production cost, so long as these are measured as capital values of future revenue and cost streams to a time horizon. But it does indicate the rational possibility of deliberate departures from profit maximization for "short" periods longer than those required to permit every adaptation in scale of firm and plant.

The Threat of Entry—General Considerations

Let us now turn to the effects of anticipated entry. Even a single-firm monopoly is not necessarily impregnable to entry if the industry is a very profitable one, and in oligopolistic industries the threat of entry is likely to be stronger. The monopolist or the group of collusive oligopolists might therefore be viewed as setting each of an indefinite succession of current prices or profits with an eye to their effect in attracting entry into the industry and thus in reducing the demand for the output of the now-established firm(s).⁶ One possibility is that the initially established seller or collusive sellers will be faced with the choice of (a) setting each of a succession of short-run prices (and hence long-run average price) so as to maximize the *industry* profit, but with the result that added firms enter the industry and reduce the share of industry profit gained by the initially established firms, and (b) setting each short-run price (and hence long-run average prices) at a lower level, thus discouraging further entry, and keeping the smaller (and non-maximized) industry profit all for themselves. Should the second course then offer larger long-run profits *to the initially established firms*, they would presumably follow it, and price could for the indefinitely long run lie below the level required to maximize the difference between the aggregate revenue from the sale of the given commodity and the ag-

⁶ The threat of entry, and its relation to price, will of course depend upon the height and effectiveness of such institutional barriers as patent holdings, control of raw materials, etc.

gregate cost of producing it. Long-run maximization of *industry profit* and of *the profit of a group of currently established firms* may not coincide. This is presumably a thesis implied by those who point to threat of entry as a factor holding price below the level which would maximize the long-run profits of the industry.

This hypothesis can easily be developed on a formal level if we accept two premises upon which it must implicitly be based. These are (1) that the established monopolist or group of collusive oligopolists are aware of any real threat of entry to their industry, and will adjust to it in such a way as to enhance their own (as distinguished from industry) profits, and (2) that potential entrants to such a monopoly or oligopoly are primarily influenced in deciding whether or not to enter by the prices charged and profits currently earned by the established firms. The first premise seems only reasonable,⁷ but the merit of the second could be contested. A potential entrant to a purely competitive industry is presumably guided entirely by the expected long-run tendency of industry price as related to his contemplated costs. This is because his increment to the industry would neither perceptibly influence the price nor engender any direct reaction from any established seller. The potential entrant to a monopoly or oligopoly, on the other hand, who will typically make a substantial lump increment to the industry capacity (since economies of scale will ordinarily require a fairly large firm), may expect both to influence the pre-existing price and to elicit some reaction from the established seller(s). This holds whether or not he contemplates collusion with those sellers. In effect, there is a special sort of oligopolistic interdependence between the established seller(s) and the potential entrants in such instances, and it is not entirely plausible that the potential entrant should entirely neglect this interdependence and view the going industry price as the principal indicator of whether or not entry will be profitable.

At the extreme, it could even be argued that a potential entrant to an oligopoly should pay little regard to price or profit received by established firms, especially if he thought price was being held down in order to "bluff" him away from the industry. He should look at the industry demand, the current competitive or collusive conditions in the industry, the prospects for rivalry or collusion after his entry, the share of the market he expects to capture, and his projected costs of production. Paramount in his considerations, provided the industry demand under some conceivable arrangement could provide profits to an entrant, should be his appraisal of the sort of rivalry and the type of price policies he will encounter from the previously established seller(s) after

⁷To argue that sellers in concentrated industries deliberately disregard the consequences of threatened entry would picture them as unbelievably stupid.

he enters. In judging these determinants of his decision, current price or profit in the industry need play no *direct* role, since the anticipated industry price *after entry* and the entrant's anticipated market share are the strategic considerations. And if he knows the industry demand with reasonable certainty and makes calculations concerning the conditions of rivalry after his entry, upon which he is willing to act, he might look entirely past any current price set by the established firm(s). He then would be immune to bluffing, and the established firm(s) could never discourage entry by lowering prices and earning moderate profits.

The supposition that the potential entrant's judgment of industry demand and of the rivalry he will meet is entirely unrelated to current price or profit in the industry, however, probably goes too far. Even if he does not believe the observed price will remain there for him to exploit, he may nevertheless regard this price as an indicator both of the character of industry demand and of the probable character of rival policy after his entry. Industry demands are never certainly known, and they are probably known less fully by potential entrants than by established firms. The fact that the established firm(s) make only moderate profits may thus create in the mind of the potential entrant sufficient uncertainty concerning the elasticity of the industry demand curve at higher prices to deter him from entering. Moreover, he may view the price which the established firm(s) currently charge as a partial indicator of the rival price policy he will face after entry. Other considerations should influence his judgment of projected rivalry, but current pricing may be a critical factor in evaluating it. It is thus possible that the potential entrant is influenced by current prices and profits and that there may be a critical price below which he will not enter and above which he will enter. This hypothesis seems plausible enough so long as the potential entrant regards the current pricing policy of established sellers as being probably a statement of intentions rather than a bluff. It is probably more plausible than otherwise when applied to oligopolies where product differentiation is not very great, and where the entry problem is thus not unduly complicated by the necessity of gaining buyer acceptance of a new product. We will speak here primarily of its application to oligopolies with relatively slight product differentiation.⁸

On the basis of the preceding argument, we may provisionally accept the second premise of the thesis concerning threat of entry, that the potential entrant to a monopoly or oligopoly is primarily influenced by

⁸It may be added that with imperfect market information, "potential entrants" may be made aware of the possibilities of an industry mainly by its profit record, and will never present an active threat if they are not alerted by high profits. In this case, low current prices and profits may serve as a deterrent to entry because they do not attract attention and thereby create actively potential entrants.

the price charged (and profit earned) by the established seller(s)—influenced not because he expects this price to hold unchanged after entry, but because he regards it as “proving” the industry demand at a given level and as a critical indicator of the projected state of rivalry or price policy after entry. Accepting the first and second premises, we may now investigate their formal implications for the price policy of an established monopolist or group of collusive (pure) oligopolists faced with a threat of entry. What will happen in these cases if (a) the established sellers(s) anticipate any threat of entry (highly probable), (b) potential entrants are influenced in their entry decisions by current price in the industry (a strong possibility), and (c) the established seller(s) know this and consider adjusting their prices to discourage entry.

A “Limit Price” Analysis

For a formal treatment, two special concepts may be conveniently employed. The first is the “limit price,” or highest common price which the established seller(s) believe they can charge without inducing at least one increment to entry—presumably a significant lump increment. This limit price depends ultimately upon the cost functions which potential entrants expect to have, upon their estimates of the industry demand and of the share of the market which they can capture if they enter, and upon their view of the degree of competition or collusion which will obtain in the industry after their entry. The subjective estimate of this limit price by the established seller(s), however, rather than the view of potential entrants, is the real determinant of the price policies of the established seller(s). Since the limit price must be defined in terms of the guess of the established firm(s) concerning the anticipations of the potential rivals, it is especially subject to error as an *ex ante* magnitude, and it may be invalid if potential entrants read it as a bluff. But it is nevertheless potentially valid and determinate.⁹ The second concept is the estimate by the established seller(s) of the conditions of demand for their outputs after entry occurs in response to their setting a price above the limit. This involves their estimate of the market share they will lose to an entrant, and also of the conditions of competition or collusion which will obtain after entry. If the established seller(s) formulate estimates on limit price, as defined, and on the position and character of the demand for their outputs after entry, these estimates can be recognized in an anticipated demand curve or sequence of demand curves for their outputs, and a formal solution developed.

This solution can follow the lines developed for the case of inter-

⁹ Account must be taken, of course, of the consequences of erroneous as well as correct estimates of this price by the established seller(s).

dependence of prices through time. We can first construct a given industry demand curve for the current Period I and for Periods II, III, etc.¹⁰ The demand for the output of the established sellers(s) in the current Period I is the industry demand of that period. In any later period, however, it can be expected to be the same as the *industry* demand only so long as price in the preceding period has remained at or below a limit price, A, so that entry has been forestalled. If any given period price is set above A, the demand for the output of the established seller(s) in all later periods is expected to become less than the industry demand by the amount of a market share going to the new entrant, and it may be otherwise altered or made uncertain if effective collusion with the entrant is not contemplated or considered attainable. If entry will occur in discrete lumps, moreover, the demand for the output of the established seller(s) in later periods does not shift continuously in response to variations in Period I price. Instead it makes a discrete shift backward if A is surpassed in Period I, and the solution is affected by this discontinuity. Given these conditions, the established seller(s) will devise a price policy for Period I and in all later periods so as to maximize the discounted present value of profits for all future periods. With an effective threat of entry, it is potentially consistent with such profit maximization by the established seller(s) that price will be held at the limit level continually through time, even though this limit price may in every current period be lower than that for which the marginal cost of the established seller (or horizontally added marginal costs of the established sellers) equals the marginal revenue drawn from the industry demand curve for that period. Such a solution can be determinate and give stability without entry for the indefinitely long run (permitting all desired adjustments of scale by the existing firms) provided the limit price estimated by the established seller(s) is in fact low enough to exclude entry. If the established seller(s) set a "limit" price which turns out to be too high to exclude entry, of course, their error may result in an effectively irreversible change in the structure of the industry.

Because the sequence analysis is unnecessarily awkward for dealing with the threat of entry, the preceding solution is only sketched. Assuming no interdependence of the *industry* demands of successive time periods to be involved in the case, the impact of a threat of entry can be analyzed more easily by referring to the anticipated long-run demand conditions for the output of the established monopolist or collusive oligopolists—or to the expected response of their long-run average sales to changes in the average level of price they maintain

¹⁰ Each such industry demand curve is assumed to be independently given in the absence of inter-period price relationships.

over long periods. Following this course, two alternative models may be developed, one assuming that the established seller(s) anticipate rivalry and lack of agreement with any new entrant, and the other assuming that they anticipate collusion with any new entrant.

The first model postulates (1) a determinate long-run demand curve for industry output, which is unaffected by price adjustments or by entry; (2) occupation of the industry initially by a single-firm monop-

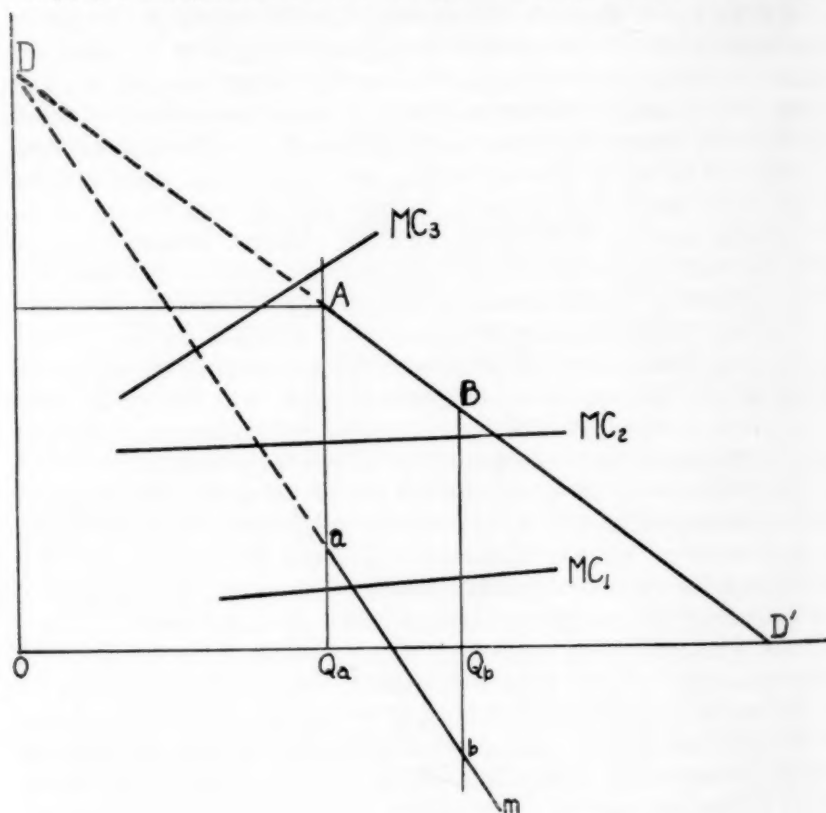


FIGURE 1

list or group of effectively collusive pure oligopolists; (3) estimation by the established seller(s) of a limit price above which a "lump" of entry will be attracted; and (4) considerable uncertainty on the part of the established seller(s) concerning the conditions of demand for their outputs if entry is attracted. Given these conditions, the anticipated long-run demand for the output of the established seller(s) may be analyzed as follows. The long-run industry demand curve is supposed to be the line DABD', as in Figure 1, and the marginal revenue drawn

to it is Dabm. This demand is assumed to be unaffected by any adjustments sellers may make. Suppose now that the limit price above which the established seller(s) expect an increment of entry is Q_aA : If they charge more than this (or produce less output than OQ_a , thus causing the effective market price to exceed the limit), they expect to experience some indeterminate loss in sales volume to an entrant and some indeterminate change in price. The anticipated demand curve for the output of the established seller(s) above the price Q_aA thus is *not* DA. They have the truncated demand curve AD' to exploit up to the price Q_aA , and the corresponding marginal revenue segment am . But if they raise or attempt to raise long-run price above Q_aA , the anticipated long-run demand curve for their output becomes indeterminate somewhere in the range to the left of A. They thus have the choice of the truncated industry demand curve AD' for exclusive exploitation up to the price Q_aA , and an indeterminate demand for their outputs if they once go above Q_aA . It should be especially noted that they are unable to sell less than the amount OQ_a at the price Q_aA and thus to exclude entry, since this would result in an effective market price higher than the limit, *via* resales, and thus presumably "reveal the bluff" and attract entry.¹¹

The alternatives open to the established seller(s) are now (1) to sell more than OQ_a at a price below Q_aA , thus excluding entry, (2) to sell OQ_a at the price Q_aA , also excluding entry, and (3) to raise price above Q_aA , or reduce output below OQ_a , thus attracting entry and taking chances on profits and prices in the ensuing indeterminate situation. They will presumably pursue the course that promises to be most profitable, taking account of the fact that profits under courses (1) and (2) are relatively determinate whereas profits under course (3) are indeterminate and hence highly uncertain. The established seller(s) will follow the first or second course in preference to the third wherever the relatively certain profits offered by those courses exceed the heavily risk-discounted gain attainable if entry is attracted *via* higher prices. The possible positions in which the established seller(s) in various industries may find equilibrium may be illustrated as follows. Suppose a single long-run marginal cost curve, for the initially established monopolist, or alternatively a uniquely determined aggregation of marginal cost curves for the initially established collusive oligopolists in any industry. This we label MC. Now first this marginal cost may in some industries lie at MC_1 (Figure 1), intersecting the relevant industry

¹¹ We exclude herewith the possibility of effective private rationing or price discrimination by the established seller(s), which might enable them to produce less than OQ_a and still hold the effective market price at Q_aA ; this appears to be a special and unlikely case.

marginal revenue segment am .¹² Then the established seller(s) will almost certainly set price and output by this intersection, provided average costs are less than the resulting price. In this case, industry profit will be maximized at a price below the limit, entry will be forestalled, and the number of sellers in the industry will be in long-run equilibrium. Conventional monopoly maximization is possible without further entry being attracted. This case subsumes all those where entry is blockaded or where the limit price is so high as to be economically irrelevant.

Second, marginal cost may in other industries fall at MC_2 , lying above industry marginal revenue but below price at the limit output OQ_2 , with average costs less than Q_2A . In this case, provided the profit offered seems preferable to the gamble of inducing entry, the established seller(s) will produce OQ_2 and sell at Q_2A . (They will then not choose the intersection of MC_2 and the marginal revenue D_2 , since this would give a price which would induce entry.) In this case entry is also forestalled and the number of sellers in the industry is in long-run equilibrium, but marginal cost exceeds industry marginal revenue and *industry* profits are not maximized.

Third, marginal cost may fall at MC_3 , lying above price at the limit output OQ_3 , but with the corresponding average cost lying below price at this output. The established sellers will still choose to produce OQ_3 and sell at Q_3A , so long as the resulting profit is considered preferable to the gamble if entry is induced. Again the number of sellers will remain constant, but industry profits will not be maximized and *marginal cost will exceed price*—not a probable but nevertheless a quite possible and rational result.

The general argument developed for the last two cases may also be applied on the supposition that the limit price lies at some level Q_2B on the industry demand curve, where this demand is less elastic than unity and the relevant marginal revenue segment, bm , is entirely in the negative range. We may still have equilibrium with entry forestalled at the limit price Q_2B (not rationally below it) with marginal cost above industry marginal revenue and possibly above price, but with the difference that industry marginal revenue is negative.

These solutions involve the premises that potential entrants recognize a limit price below which they will not enter, and that the established seller(s) know this and do not overestimate the limit price. Should

¹² In this and each of the succeeding cases we refer to distinct industry situations, each with a separate limit price, a separate initial marginal and average cost function, and a different relation of marginal and average cost to the limit price. We do not suggest different relations of cost to limit price in a single industry, but rather differences among industries in this respect.

potential entrants fail to be influenced by price, a stable solution will not result if entry promises to be profitable; if they are so influenced but the established seller(s) set too high a price, there will be entry and a probably irreversible change in industry structure will result. One qualification may be added to the preceding argument. In deciding whether or not to go above the limit price, the established sellers should count in favor of the former course any transitional extra profit they may earn after going above the limit and before entry becomes effective.¹³ This consideration has not been formally treated in the preceding model.

A fourth possibility is that average cost for the established seller(s) will lie above the limit price Q_aA at the output OQ_a , marginal cost lying above or below price. In this event price will presumably be set above the limit and entry attracted, provided there is some possibility of making profits at smaller outputs.¹⁴ The number of sellers in the industry then could not be stable until further entry had occurred.

Considering the various possibilities, there is a very good *a priori* chance on the assumptions drawn for the threat of entry to force a significant departure from what have been viewed as the conventional long-run monopoly-equilibrium price and output in single-firm monopoly or collusive oligopoly industries. It has been conventionally supposed that the single-firm monopolist will set a price such as to maximize long-run *industry* profit, and that collusive oligopolists will do likewise. It has been further suggested that this may result, at least in collusive oligopoly, in the attraction of entry to the point where excess profits are small or absent and the industry contains an excessive number of firms.¹⁵ But under the assumptions of anticipated entry and a response of entry to price, we see that, consistent with profit maximization by firms, the price in such industries may be lower and the output larger than would maximize long-run *industry* profit. A vigorous threat of entry which at an appropriate time is anticipated and forestalled, moreover, may serve to keep firms producing at outputs which give a fairly close approximation to optimum average costs. If the firms in an industry are so few that they would encounter serious diseconomies of scale in supplying the limit output, they may be unable profitably to forestall entry. But when the number of firms becomes such as

¹³ In a dynamic model, we might consider the possibility of a critical or maximum short period during which established sellers could temporarily go above limit price without attracting entry, returning price to the limit in time to discourage potential entrants.

¹⁴ In this case, however, the potential entrants presumably being able to attain lower average costs than established firms, it is doubtful that any price stratagem would forestall entry.

¹⁵ E. G. Chamberlin, *The Theory of Monopolistic Competition*, 1st ed., pp. 100-108.

to allow production of the limit output at near-optimum average costs, excessive entry may be profitably forestalled by limit-pricing policies and an economical adjustment of capacity to demand perpetuated.¹⁸

The preceding hypotheses are developed on the basis of certain crucial assumptions, of which the only really controversial one is that potential entrants to concentrated industries may be significantly influenced in their entry decisions by the prices set by established

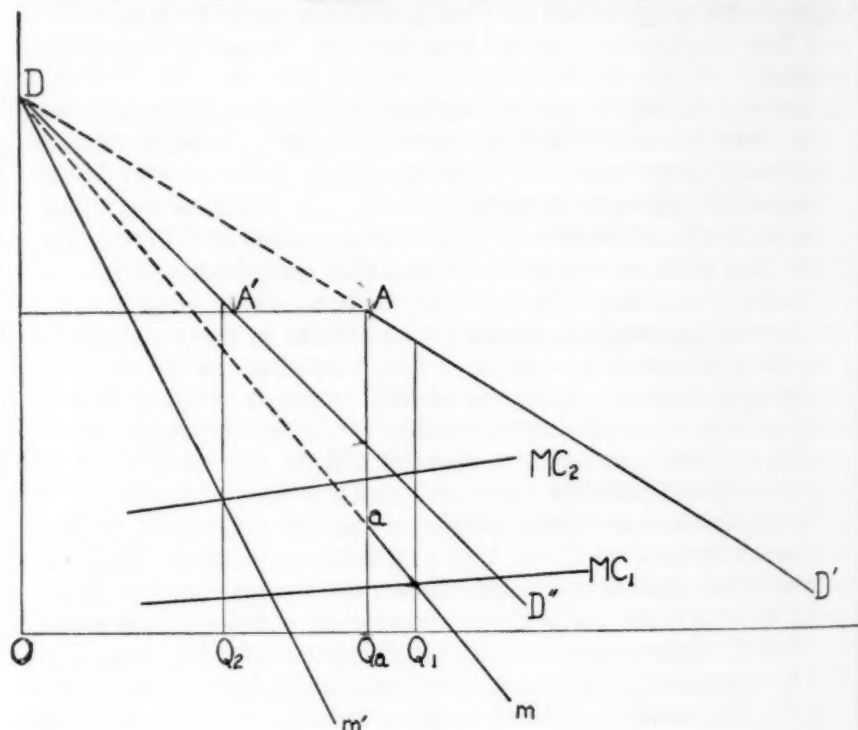


FIGURE 2

sellers. This assumption may or may not find extensive empirical support. But the observed price policies in a considerable number of oligopolistic industries with apparently effective collusion on price are consistent with hypotheses developed from the assumption, and we may have a thesis of real explanatory value.

The model discussed above also rests on the assumption that the established seller(s) are uncertain of the rivalry which will exist if

¹⁸ It is of course evident that if once an oligopolistic industry gets an excess number of firms—whether because the threat of entry is overlooked, or because the limit price fails to forestall entry, or because industry demand declines—then there is no evident force which will eliminate firms and give such a good adjustment. But it nevertheless holds that excessive entry may be deliberately forestalled in the manner described.

new firms enter the industry. Its conclusions are not essentially modified, however, if we assume instead that the established seller or collusive sellers contemplate effective collusion with any new entrants. If this is assumed, together with the assumption of a determinate industry demand curve and an anticipated lump of entry above a given limit price, the analysis develops as follows. The long-run industry demand curve is DAD' (Figure 2) and the marginal revenue drawn thereto is Dam , as before. Similarly the limit price is Q_aA ; above it the demand for the output of the established seller(s) is not DA , and the marginal revenue segment Da cannot be exploited by the established seller(s). If the established seller(s) go above the price Q_aA or below the output OQ_a , however, the resultant entry does not render the demand for their outputs indeterminate, since effective collusion with any entrant is contemplated. Presuming that the market share going to the entrant under such collusion is calculated, the established seller(s) anticipate a determinate loss of the total market volume to the entrant at each possible price. Then if they raise or attempt to raise long-run price above the limit, the anticipated long-run demand for their output becomes some determinate curve DD'' , lying to the left of the industry demand curve by distances representing the share of the industry output an entrant would obtain at various prices. The corresponding marginal revenue is Dm' .

As an approximation we may say that the established sellers' demand function is discontinuous horizontally, made up of the segment AD' below the price Q_aA and the segment $A'D$ above that price. This is not precisely accurate, however, since the attempt by established sellers to charge more than Q_aA , involving attraction of new entry, might result in a collusive equilibrium price *after entry* which lay below Q_aA . The curve DD'' thus can have a meaningful price range which overlaps that of AD' . The diagram may therefore be read as follows: the established sellers can in the long run sell any of the price-output combinations on the line AD' (the quantities OQ_a or larger) without attracting entry. If they go above the price Q_aA , or attempt to, they thereafter in the long run can sell any of the combinations on the line DD'' , with the remainder of the industry demand going to a new entrant or entrants. In effect, the established seller(s) are given the choice between the truncated industry demand curve AD' for exclusive exploitation and the non-truncated share of the industry demand curve, DD'' , for exploitation *via* collusive agreement with the new entrant.¹⁷ The AD' and DD'' curves adequately compare the revenue alternatives of the established seller(s) with

¹⁷ The latter curve might also be truncated at a higher level due to an additional threat of entry, but we will focus attention here on a single increment of entry.

and without entry, so long as we neglect any transitional extra profit which the established seller(s) might enjoy while raising above Q_aA but before entry became effective. If such a transitional profit is significant, it must be considered as augmenting that long-run average profit which is obtainable by exploiting DD'' after entry.

If we place the long-run marginal cost of the established seller(s), as previously defined, against this demand complex, conclusions generally consistent with those already developed emerge. Suppose that the marginal cost of the established seller(s) lies at MC_1 , so as to intersect industry marginal revenue in the range am , where price can be below Q_aA . Provided that total profit at the output OQ_1 , determined by the intersection of MC_1 and am , is positive and exceeds profit at the intersection of MC_1 and Dm' , the established seller(s) will produce OQ_1 , charge a corresponding monopoly price below Q_aA , and maximize industry profits without attracting further entry.

Suppose instead that the marginal cost lies at MC_2 , so as to lie above industry marginal revenue at the limit output and to intersect the marginal-revenue-after entry, Dm' , at an output, OQ_2 , which gives a price above Q_aA (average cost being less than Q_aA at OQ_2). The established firm(s) can supply the entire industry demand OQ_2 at the price Q_aA , or part of the industry demand, OQ_2 , at a higher price. They will choose between these discrete alternatives by comparing *the lump increment to total revenue* with *the lump increment to total cost* which are incurred in moving from OQ_2 to OQ_a .¹⁸ If the revenue increment exceeds the cost increment (the area under MC_2 between Q_2 and Q_a), they will produce at OQ_a , sell at Q_aA , and exclude entry. The profits of the industry will not be maximized, but those of the established seller(s) will be. This holds for MC_2 in successively higher positions until the cost increment exceeds the revenue increment between Q_2 and Q_a ; even production at OQ_a with marginal cost above price is possible. When the lump cost increment exceeds the lump revenue increment, price will be raised above Q_aA and entry will be attracted. (Average cost must of course always be covered at the best output or exit from the industry will occur in the long run.)¹⁹

¹⁸ This lump increment to revenue if the limit output is chosen (as aggregated over all future periods) must be considered as reduced by any transitional extra profit receivable after raising price above the limit but before entry becomes effective.

¹⁹ The general conclusions also hold if the marginal cost lies so as to intersect Dm' where price would be below Q_aA , and to lie above industry marginal revenue at OQ_2 . The limit output will be produced and entry excluded so long as the revenue increment exceeds the cost increment between the alternative outputs. In this case we have the situation that collusive price after entry would lie below the limit price which should presumably attract entry. If we remember that the limit price is not necessarily the minimum which entrants expect after entry, however, this situation is not necessarily anomalous.

On the supposition of collusion after entry, we thus arrive at conclusions regarding price similar to those developed when assuming uncertain rivalry after entry. It may be objected, of course, that if established sellers assume collusion after entry, and potential entrants assume it too, then these potential entrants should not be much influenced by the current prices of established sellers, and that a limit-price analysis is thus implausible. It becomes plausible evidently only if potential entrants are quite uncertain about industry demand and about how they will be welcomed by established sellers. But such an incongruity of attitudes is itself not implausible, and the model just developed may thus constitute a realistic variant of our first model.

In summary, a considerable elaboration of the theory of monopoly and collusive oligopoly price may be implied if we assume that potential entrants to an industry are influenced by the going prices therein, and that established sellers anticipate and, if it is profitable, forestall entry. Assuming correct appraisal of limit prices by established sellers, we get three major possibilities: (1) pricing to maximize industry profit with no entry resulting; (2) pricing to forestall entry with industry profit not maximized but the profit of established sellers maximized; and (3) pricing to maximize industry profit but with resulting attraction of additional entry. The first two cases find industries already in long-run equilibrium; the third finds industries in process of dynamic change in structure.

Extensions and Applications of the "Limit-Price" Analysis

The limit-price models just developed, tracing the effects of a sort of oligopolistic interdependence between firms already in a concentrated industry and potential entrant firms, are essentially variations on the general theory of oligopoly price. There is an apparent similarity of the construction to the familiar kinked demand curve analysis, but in the present case the average revenue as well as the marginal revenue is discontinuous, and it is a revenue function for all firms already in an industry rather than that for a single oligopolist which is so affected. The limit-price analysis applies to collusive oligopoly behavior, whereas the kinked demand curve model refers explicitly to the action of a firm in non-collusive oligopoly. And the essential conclusions of the two models are of course different.

Various extensions of "limit-price" reasoning suggest themselves. Thus some firms established within an oligopoly may hold price down for fear of "fattening" their smaller rivals sufficiently to encourage their expansion. Departing from the realm of pure oligopoly, established collusive firms might extend selling costs beyond the point of industry profit maximization in order to discourage entry, so that

the threat of entry could cause increased costs rather than reduced prices. The model developed above could also be elaborated to take explicit account of dynamic changes, of varying time lags involved in the "gestation" of new entry, *etc.* Any extensions along these lines might contribute to a more realistic theory of oligopoly price.

The explanatory value of the limit-price hypotheses of course remains to be determined. On *a priori* grounds they appear to be fruitful, although alternative explanations of observed "low-price" policies may also be valid. Some systematic empirical check of the extent of "limit price" thinking within concentrated industries, and especially by price leaders, would seem desirable. Direct verification of the crucial hypotheses from *ex post* statistical results, however, would be difficult. The "limit price" in any industry, even if recognized, must change over time in response to variations in industry demand, in factor prices, in the availability of capital to potential entrants, in the age of the industry, and so forth. The single limit price of our static long-run analysis becomes in fact a dynamic variable, and would have to be treated as such. It would be difficult to establish in a strictly objective fashion, and knowledge of its recognition by sellers or of its magnitude might best be gained through interview techniques. It would be somewhat easier, on the other hand, to check observed price results for consistency with the hypothesis, without relying on the subjective impressions of sellers involved. That is, objective calculations of the probable limit price (or time series of limit prices) could be made for any industry, and the prices actually charged in a supposedly collusive oligopoly could then be compared both with such limit prices and with prices calculated to maximize industry profits. Wherever behavior consistent with the hypothesis was found, direct investigation of policies of price calculation might be indicated. The emphasis often placed on non-profit motives, uncertainty, irrationality, and oligopolistic rivalry as explanations of low-price policy in concentrated industries may be unduly heavy, and the effects of threatened entry seem certainly to deserve consideration.

THE STATE OF THE "NEW ECONOMICS"

By HOWARD S. ELLIS*

The general conclusions to be drawn from a newly published volume of essays on *The New Economics*¹ seem to be that Keynes has influenced economic theory and policy as has no one else, living or dead; that much of his influence is beneficial; but that much, if indeed not most, of the theoretical innovations of the *General Theory* are acceptable only with extensive reservation or unacceptable as descriptions of reality. The subtitle of the volume to be reviewed correctly stresses Keynes' *influence*, and the main title the novelty of his positions. The only misleading feature may be the juxtaposition of the subtitle with the phrase "*the new economics*." For it is amply evident, if one compares certain appraisals of the *General Theory*, written ten or twelve years ago and reproduced here, with the essays written for the present collection,² that the former proclaimed the new doctrines confidently and without qualification, but that the latter—as we shall see—generally present more qualification and addition than original substance. How much Keynes contributed in his last major book depends on whether one stresses the *impulse* toward new ideas and new lines of investigation, or, on the other hand, what he actually *held* in the *General Theory*. Thus Professor Hansen says: "Keynes, however, contributed greatly to the theory of the rate of interest. As a result of his analysis we now place less emphasis than formerly on the rate of interest as a means of increasing the volume of investment" (p. 138). In other words, although Keynes put interest at the very center of his theory, he "contributed greatly" because we now recognize the limited efficacy of interest rates. On the other hand, Leontief rather more candidly writes in general appraisal of Keynes: "He seemed to press, however, for reconstruction of the whole foundation in order to mend a leaky roof" (p. 242).

Furthermore, even so far as concerns the *impulse* to new ideas, one has to consider the contributions made by Keynes' contemporaries, pre-eminently D. H. Robertson—contributions too frequently attributed in the current literature simply to Keynes alone. A re-reading of the Macmillan report, for example, reveals the extent to which Keynes' ideas were anticipated by Robertson.

The New Economics is set together from ten chapters and a Keynes bibliography contributed by the editor, seventeen items available from earlier sources, and nineteen essays (beside the editor's) written for the occasion. For one not conversant with the literature it would be difficult to identify new and old, since no indication of old sources is given in the main text;

*The author is professor of economics at the University of California, Berkeley.

¹*The New Economics—Keynes' Influence on Theory and Public Policy*. Edited by Seymour E. Harris. (New York: Alfred A. Knopf. 1947. Pp. xxii, 686. \$4.50.)

²Not including those written by the editor.

instead, acknowledgments are made all together on page viii, and reprinted items frequently appear under somewhat altered titles. The present review will not concern itself systematically with either the editor's chapters, or with those reproduced from elsewhere. So far as concerns the former they are intended to "summarize, integrate, and fill in some gaps," but it is doubtful whether this is an appropriate description. So far as concerns the latter, it is convenient to have included Keynes' proposals and addresses pertaining to the Fund, Bank, and British Loan, and also such early systematic explanations and espousals of the *General Theory* as Lerner's, Harrod's, and Meade's. Early restatements which were coupled with largely adverse criticism have not been included, as for example: Hansen in the 1936 *Journal of Political Economy*, Leontief, Robertson, and Viner in the 1936 *Quarterly Journal of Economics*, and Pigou in the 1936 *Economica*. Since these articles include many points of continuing validity, they would have furthered the reader's appreciation of the character of the Keynesian influence.

But the older articles included are well worth renewed attention; and, of the newly written essays, not more than two or three represent net subtractions from the sum of human knowledge, a number offer careful reviews of the content or evolution of Keynes' own thinking, and several contribute very significantly to particular subjects. Taken as a whole, the volume thus attains a quite high average, and Professor Harris might justifiably regard it as the high point of his career as editor. Academic economists will profit, as the reviewer has, not only by studying the book, but also having it available for student use. What, specifically, do the new essays offer?

Amongst the first of these essays are two by Professor Hansen, of which the first is moderate in tone and not particularly striking. Keynes contributed, he says, to the realization that a capitalist system does not tend automatically to sufficient effective demand; and since Hansen also stresses the error of making too sharp a dividing line between pre-Keynesian and Keynesian economics, he would probably not wish to imply that insufficient demand was not a major concern of "business-cycle" theorists prior to Keynes. Keynes also emphasized the dependence of many economic variables upon income, the unreliability of wage-reductions to extend employment, and the possibility that increasing liquidity may not increase consumption. In these points Hansen seems to set forth matters of fairly common accord. But if the consumption function represents Keynes' main contribution, as Hansen maintains, he fails to explain why it is so. He says (p. 137) that this function (*via* the multiplier) supplies the missing link in the reasoning by which "current realized income . . . is less than the normal or full-employment income by the amount that current investment falls below the potential saving at full employment." This sounds very much like the "Fundamental Law" and seems to link unemployment to higher savings as income expands. And yet, so far as concerns secular developments, Hansen very clearly denies the multiplier (consumption function) direction of causation from consumption to level of income and maintains the opposite: "the rising standard [of

consumption] follows the rising income, not the other way around." Is the reverse true for the short run?

Having taken pains in the first essay to demonstrate that a fall of the *rate of interest* does little to expand employment (p. 139), and having emphasized that increased liquidity may be relatively ineffective (p. 151), Hansen reverses himself implicitly when in a second essay he says of money wage reductions: "That so clumsy a method of *securing a low rate of interest* and a relative increase in liquid assets should command the attention of able economists in a modern society equipped with a stream-lined central banking system is a mystery which I am unable to solve" (pp. 201-2, italics mine). Is the system "stream-lined" because its low interest rates have no significant result? In this chapter also there is a long and confused footnote in which Hansen apparently objects to anyone's saying, even if one uses Robertson's periods, that if "excess savings" were tapped and invested, income would not fall. In Robertsonian terms, if savings exceed investment, hoards increase (or bank-loans are repaid). Hoarded sums are by no means limited to current hoarding, as Hansen implies, and current hoarding, by the conversion of illiquid assets into liquid assets, is by no means limited to current income, as he also implies; in a depression, hoards are not apt, therefore, to be "extremely small," as he states. Contrary also to his contention, "idle funds" are quite properly described as an evil. In depression, they are the outgrowth of liquidity preference; and in the postwar period (in which the idle funds stemmed from wartime rationing and not "preference" in any significant sense), they have confronted the various countries with the alternatives of continued controls with suppressed inflation, or of actual inflation. Professor Hansen's miscarried originality when he attempts to think in terms of velocity and cash-balances does not lend much effect to his immoderate language in characterizing this approach as a "curious contraption from the horse and buggy stage" (p. 201).

General appraisal of Keynes' work as a whole and the *General Theory* specifically is essayed also in newly written but very brief papers by Harrod, Copland, and Tinbergen; and in more extended and noteworthy contributions by Haberler and Leontief. Harrod's short review of Keynes' chief works throws into a clear light the fact that "Whatever the final verdict on the *General Theory*, Keynes' greatness as an economist will not be questioned"; Professor Copland stresses the substantial influence of Keynes on public policy in Australia; and Tinbergen shows how readily Keynesian concepts fit into econometric analysis.

Haberler, Leontief, and, in a later context, Smithies are really the only contributors to the volume who attempt systematic criticism of the pure theory of the *General Theory*; and their essays are amongst the best for theoretical acumen. Haberler says (as the reviewer has long believed) that "Keynes' great contribution was that he strongly emphasized the income factor and used it much more systematically in the analysis of economic change than had ever been done before" (p. 166). Aggregative analysis had already been successfully pursued by most business cycle theorists, before

1936, and the marginal efficiency of capital analysis follows conventional lines. Liquidity preference theory, which had been substantially advanced by the *Treatise*, suffered a setback in the *General Theory* by virtue of its making the actual holding of idle balances (L_2) solely the result of anticipations of a rise in interest rates.³ Haberler questions the realism of the idea of under-employment equilibrium and adumbrates future lines of analysis which will prove more fruitful than the static equilibrium device. At bottom the Keynesian *impasse*, or under-employment equilibrium, rests upon (a) the possibility of absolutely elastic liquidity preference, or (b) highly inelastic investment propensities, both with reference to the rate of interest. In the short run, says Haberler, these do not produce equilibrium, but a progressive tendency of prices, wages (and also employment, I would add) to fall. Actually the short-run under-employment equilibrium would result from adverse shifts of Keynesian schedules in ways not covered by his system; and in the long run, the assumed unfavorable elasticities can scarcely be expected to persist. Haberler regards Keynes' refutation of Say's Law as killing dead horses: "hardly any neo-classical economist who ever wrote on money or the business cycle thought that Say's Law did hold in reality" (p. 174). In sum, though the *General Theory* is a new milestone, it does not constitute a revolution of economic theory. A contrary impression might be conveyed by the "excessive and untenable claims made by Keynes and his followers," and by the adherence of a socialist or radical wing. Haberler, however, believes that Keynes himself belonged to the opposed or liberal wing, and this judgment is reflected also in Harrod's essay (pp. 71-72).

Leontief concerns himself with the two principal differences between the classical and Keynesian systems: their divergent assumptions regarding the supply of labor and the demand for money. While the classical supply curve of labor is a function of real wage rates, Keynes' is a function of money wages, of perfect elasticity and with no labor forthcoming at a lower level, as would result from a minimum wage law. Unlike the classical function, which fits into the general framework of utility functions, Keynes' function is an arbitrarily assumed, exogenous element (pp. 233-37). To make it compatible with accepted ideas of utility or indifference functions in the field of value theory generally, one would need to reconstruct the Keynesian curve by making it depend on both relative and absolute prices and wage rates. Then all other demand and supply functions will have to depend on a price and wage-rate variable; and thus by increasing the number of variables necessary to explain a given phenomenon, the Keynesian approach becomes less general than the classical system. The disastrous consequence of this reconstruction is, however, that if labor is guided by the purchasing power of money income in bargaining for money wages, the Keynesian involuntary unemployment disappears. Thus the explanation appears for his "insistence on universal validity of an apparently quite special assumption," the horizontal labor supply function.

³ William Fellner has stressed the improbability of such anticipations in depression; cf. *Monetary Policies and Full Employment* (1946), Chap. V.

But even this special assumption would not produce involuntary unemployment if the horizontal supply line intersected demand at a wage equal to or greater than that required by the supply curve in real terms. If the intersection of the monetary labor-supply and labor-demand schedules rested below this level, both schedules could be raised bodily by reducing the purchasing power of money: involuntary unemployment would be eliminated.⁴ To prevent this outcome, Keynes introduces a theory of automatic hoards as the result of infinite elasticity of the demand for money with respect to interest. The price level cannot be raised because monetary injections will pass into idle balances, an assumption—Leontief might have added—required also by the Keynesian finite cumulative multiplier.

Proceeding from these general appraisals, *The New Economics* devotes separate parts to International Economic Relations, Economic Fluctuations and Fiscal Policies, Money and Prices, and Effective Demand and Wages, each of them including notable new essays. Arthur Bloomfield provides a scholarly summary of Keynes' positive contributions in his various books to exchange rate theory and their implications for the International Monetary Fund. Keynes undoubtedly induced a desirable scepticism with respect to devaluation as an infallible cure of deficits, especially in the short run; and it may be useful for certain purposes to regard "fundamental equilibrium" in the balance of payments as implying full employment in the home economy. Hinshaw's short chapter shows clearly that, though Keynes occasionally seemed to verge upon economic insularity, fundamentally and finally he held that direct intervention devices "will work better and we shall need them less, if the classical medicine is also at work" (quoted on p. 322).

The longest chapter in the book and certainly one of the most profitable is Ragnar Nurkse's analysis of "Domestic and International Equilibrium" (pp. 264-92). Substantiating a view expressed earlier in the present review that the outstanding merit of the *General Theory* is its dramatic emphasis upon income, Nurkse finds the great contribution of Keynesian economics to international trade theory to be its illumination of the income and employment variables in international equilibrium problems (p. 268). Indeed, since these variables were certainly important in the thinking of other economists than Keynes so far as concerns domestic fluctuations, I might hazard the guess that Keynes' ultimate contribution will prove greatest in international economic theory, which had been singularly preoccupied with the allocation of resources and price (rather than income) elasticities. Not much of the new economics under this subject appears in the *General Theory*, but the great impulse to the reformulation of international money and trade theory clearly proceeds from this quarter.

If "fundamental equilibrium" is extended to include full employment, Nurkse takes the necessary further step of including also an absence of price

⁴ Leontief might have pointed out that not only is this the necessary implication of the Keynesian supply function, but also that it is exactly what Keynes describes as the cure of involuntary unemployment in the formal definition of the concept; cf. *General Theory*, p. 15.

inflation or deflation (p. 272). He sharpens the new theoretical tools in a precise footnote on the relation of marginal propensity to import and income elasticity of imports (p. 270, n. 8); and he provides a good conceptual test of aggressive and justifiable commercial and exchange-rate policies. Carrying forward the emphasis of *International Currency Experience* upon the crucial importance of international currency reserves, Nurkse demonstrates the necessity of international cooperation to achieve high employment levels and international equilibrium. Like Hinshaw, he presents evidence that Keynes, unlike some of his extremist disciples, regarded currency rationing, bilateralism, protective tariffs, etc., as temporary and unwelcome expedients: basically he was "the true internationalist among modern economists" (p. 285).

In view of the central problems of the *General Theory*, it is appropriate that the editor evoked for "Economic Fluctuations and Trends and Fiscal Policy" six new essays, the largest number in any part. Albert G. Hart, dealing with "Keynes' Analysis of Expectations and Uncertainty," points out that the *Treatise* introduces anticipations only on special occasions, while the later book makes them central to all economic decisions. Specifically, Hart regards as substantive contributions: the speculative motive for holding money, the analysis of forward markets (in the *Treatise*), the marginal efficiency of capital as a psychological phenomenon, and role of "animal spirits" in entrepreneurial decisions. On the other hand, he finds that Keynes confused *ex ante* and *ex post* values, neglected short-term expectations (?), failed to appreciate differences of degree in liquidity of assets, and utilized the dubious device of reducing true contingencies to certainty equivalents. Hart concludes with a warning to followers of Keynes against neglecting the increase of business uncertainty which may attend economic intervention.

In discussing "Declining Investment Opportunity," Alan Sweezy reviews the evolution of the thesis and offers some reasonable objections to crude misinterpretations. To test the thesis formally, however, he proposes a model in which "there are no new inventions, no shifts in demand, no new resources to exploit; in short, no outlets for investment except in providing more equipment of existing types and more working capital for the increment of population" (p. 433). Sweezy regards this model as one designed "to simplify the problem." But actually in the phrases before the semicolon, he selects imaginable though improbable circumstances most apt to result in stagnation of investment. On a formal plane, however, he commits two errors even on this favorable terrain. In the first place, it does not require new inventions in order that capital be substituted for labor, and hence the "equipment of existing types" following the semicolon is a *non sequitur*. This is particularly striking since he himself envisages the outcome of his model to be a rise in real wages and a fall in "profits" (in the classical sense). Secondly, he represents the possible consequences of the fall of "profits" to an unsatisfactory level to be either reduced saving or the (indefinite) holding of savings in liquid form. The latter solution, however, would have to meet Hart's objection that "if the growth of cash relative to income is capable of affecting the propensity to consume in the slightest degree, it can generate experiences

which will justify raising estimates of money receipts from equity assets" (p. 421).

"Keynes and the Theory of Business Cycles," by Lloyd Metzler, presents the view that Keynes was responsible for refuting (1) "the usual assumption amongst more analytically minded economists . . . that the economic system tends automatically toward a state of full employment" (p. 438), and (2) Say's Law, which "leads to the conception of the economy as an unstable system *in which a slight contraction leads to further contraction*, and a slight expansion set off a cumulative upward movement" (pp. 442-33, italics supplied). Sufficient evidence could be marshalled, the reviewer believes, that the "more analytically minded economists" who considered the problem of business cycles prior to the *General Theory*, e.g., Keynes himself, Robertson, Pigou, Hawtrey, Schumpeter, Mitchell, and so on indefinitely, held neither (1) that the economic system tends automatically toward full employment, nor (2) Say's Law. This exercise will prove superfluous, however, if the author will reconsider his charge against the "more analytically minded economists" under heading (1), in the light of what he says about them under heading (2), and *vice versa*.

One of the most illuminating and judicious essays of the volume, on "Fiscal Policy," emanates from Gerhard Colm. While profoundly affecting the views of economists and legislators as to the virtues of a balanced budget, Keynes did not give exclusive attention to fiscal policy as a means of combating depression; and Colm himself believes that "flexibility in the Federal budget is limited," although "our legislative and administrative machinery is not yet fully equipped to use even this limited existing flexibility" (p. 464). For those who, like the present writer, would like to see the *first* (but not *last*) fiscal line of defense against inflation and deflation in direct variations in federal revenue, rather than in inverse variations in federal expenditures, it would pay not to lose sight of Colm's warning that "the multipliers applicable to a reduction in income taxes which are already nearer the maximum rate of progression is relatively small" (p. 465). This implies that combating inflation by *fiscal* (as opposed, say, to monetary) devices has to bear more severely on the low-bracket incomes. Colm believes that Keynes slighted cost-price relations as determinants of investment and consumption; "additional government investments can hardly be regarded as the most rational cure when excessive prices or costs [arising, he explains, from excessive monopolistic prices or too rapid an increase in wage rates] are the cause of a disturbance" (p. 457). As for the opposite extreme of fluctuation, "it may well be that the first recession after the postwar boom may be of a nature that requires first of all measures designed to adjust costs and prices in relation to incomes, rather than fiscal policies" (p. 467).

Whereas Colm believes that "there has been a growing recognition of the practical limits of a public-works policy as an anticyclical device (p. 464), Benjamin Higgins, in an essay devoted to this subject, maintains that the *General Theory* has elevated public investment "from the rank of last line of defense to major offensive strategy" (p. 474). Keynes' *opus* despaired of

stimulating private investment, at least in the long run, and hence gave about coordinate importance to raising the propensity to consume and to public investment (pp. 474-75). Higgins, however, regards the former as more promising as a secular than as a countercyclical device, and hence concludes that "public investment is left virtually in sole possession of the field, when it comes to policies for offsetting fluctuations in private investment" (p. 476).² With respect to leaf-raking varieties of Keynesian "investment," Higgins supplies an interesting proof that "the useful projects will have greater multiplier effects just by the value of the direct services they yield" (p. 479).

The last chapter devoted to fluctuations is by Richard M. Goodwin on the multiplier. This essay raises a substantial number of difficulties. Is it a fact that Angell gives the income velocity of *active* money a value around 3 per annum (p. 488)? If newly created money comes to be divided between active and idle in same proportion as prevailed before the injection, will not velocity remain constant (cf. *General Theory*, p. 306); or is velocity constant *only* if all the new active money is newly created money, and if there was no idle money before (Goodwin, p. 492)? The multiplier, telling "by how much the original injection is multiplied to obtain the final result" on income, gives "the typical life history of any dollar spent . . . from birth to death" (p. 484). If *any* dollar spent typically "dies," why are not *all* dollars sooner or later "dead"; or is it just the "injection," no more and no less, which dies? If, following the author's practice, all spending not out of *income* (consumption or investment from dishoarding or new money) is excluded from the multiplier, can we then say that "it is to the multiplier, not velocity, theory that one has to turn for the explanation of the variations [of income]" (p. 489)? A satisfactory treatment of the relationship between the multiplier and velocity should resolve these and a number of other difficulties involved in the essay.

The Part dealing with "Money and Prices" includes a single paper, contributed by John Lintner. This essay begins by contrasting the highly simplified monetary analysis current in this country during the first World War with the more sophisticated analysis of World War II, which proceeded from more advanced theory and the great boon of fairly complete national income statistics. Part of this advance in theory is attributable to Keynes, whose monetary analysis Lintner traces through the *Tract on Monetary Reform* (1923), the *Treatise on Money* (1931), and the *General Theory*. The *Tract* contributed a clear statement of the Cambridge cash-balance theory, but labored under the handicaps of: (1) tracing relations between money and prices on the assumption of constant output; (2) neglecting the precautionary motive for holding money; (3) lumping all groups of money holders together.

The *Treatise* eliminated the second and third of these limitations, considerably advanced the explanation of motives for holding money, and drew some illuminating distinctions between the behavior of various groups of cash-

² It is not clear whether Higgins means this literally, including tax-structure, revenue reduction, cost-pure relations, etc., or only relatively to varying consumption.

balance owners. Indeed, the *Treatise* reached a plane of monetary analysis superior to the *General Theory* in a substantial number of respects. The *Treatise* laid weight upon *shifts* in liquidity preference, while the later book attempted pretty much to operate along a given liquidity function. The *Treatise* emphasized the dependence of idle balances on the yield of all types of earning assets, while the *General Theory* operates in the narrow confines of cash *vs.* bonds. While the later work treats all balance holders alike, the former distinguished forms and individuals. The *General Theory* must also be taxed with engendering confusion as to the necessarily-equal and not-necessarily-equal meanings of saving and investment.

What the *General Theory* accomplished, over the yield of earlier works, was the integration of output (income) variation into a general equilibrium system. Lintner believes that an analysis running in terms of liquidity preference, marginal efficiency, and the multiplier determined by the propensity to consume is a much more powerful apparatus than analysis in terms of "the one 'blanket' factor V" (p. 532). While I also would prefer three variables to one, I do not believe the alternatives are necessarily those thus stated. And who has, as a matter of fact, explained variations of output in terms solely of V?

We turn to the last group of contributed essays, consisting of two by Arthur Smithies and James Tobin. While the caption given to this Part is "Effective Demand and Wages," Smithies' paper really offers a succinct statement of the whole Keynesian and the contrasting "classical" system, and a general critique of the former. For comprehensive statement within economical confines and for genuine theoretical acumen, the essay is unrivalled. I shall not reproduce Smithies' reproduction of the Keynesian and "classical" systems but emphasize his critical and suggestive efforts "Toward a More General Theory." Taking the *General Theory* as a valuable achievement, he believes that it must be amended or broadened in the following respects. (1) Keynes' assumption of constant equipment must be revised to include a theory of the optimum rate of accumulation; and his assumption of constant techniques must give way to a theory which recognizes substitution of factors. (2) Keynes omits consideration of the adjustment *vs.* the equilibrium effects of changes in effective demand. (Technological unemployment would afford a good illustration.) (3) His assumption of perfect competition lets the following possibilities escape attention: that, with decreasing costs under monopoly, employment and real wages can both increase *within a range*; that reducing monopoly restriction may increase both employment and real wages; and that bilateral monopoly between labor and business may produce a full-employment dilemma. (4) The Keynesian assumption that real income and employment are determined independently of wages and prices ignores that as the latter rise, progressive income taxes give a revenue increase proportionally greater than the wage-price advance, and the fixed money commitments (interest, etc.) produce an expenditure increase which is proportionally less. (5) In an economy with mobility of resources and the price of imports and exports established in world markets, *money* wage rates would determine real wages and employment. Keynes' contrary conclusions

rest upon his assumption of a closed economy. The theoretical reconciliation of these two possibilities with Keynes' opposition to restrictive commercial policy has not been worked out. (6) Aggregative theory neglects the whole yield of "classical" theorizing as to the bearing of relative wages and prices and the allocation of resources upon output and employment as a whole. (7) Dynamic factors exogenous to the Keynesian theory require recognition and elaboration: the wage increases of 1937 contributed to the subsequent depression; low profits may influence plans and later investment rates; consumer demand may not be a function of current income alone, but also of expectations as to future prices, etc. In sum, "the *General Theory* is a most constructive tool for those who are aware of its limitations, but a dangerous one for those who ignore them" (p. 569).

Finally, we must consider all too briefly the brilliant essay by James Tobin on "Money Wage Rates and Employment." Like Leontief, Tobin argues that Keynes is wrong in representing the volume of employment as independent of money wages. Both would apparently agree that the Keynesian position is wrong (1) if *all* factors including labor are supplied with reference to the purchasing power of money, or (2) if they *all* are equally victims of the "money illusion" and bargain solely in money terms. Leontief argues that a real calculus is probable for all factors, whereas Tobin believes that there are good reasons for supposing that labor bargains in money terms (p. 581) and for the same supposition for other factors (p. 582). Since it is a lack of homogeneity on this score which Keynes' position requires, both agree in the final outcome. Furthermore, both agree that real consumption cannot be uniquely a function of real income, as Keynes would have it; Leontief would say, because consumers look beyond prices, as all factor owners do; Tobin would say, because consumers do not look beyond prices, and all factors do not (pp. 583-85). Here again both agree that the Keynesian position on the consumption function cannot be maintained if a "homogeneous" assumption is maintained with regard to attitudes toward money and real values. Tobin elaborates still further reasons for rejecting the Keynesian position and summarizes his case under six possible channels through which money wages can affect employment: (1) business confidence; (2) the balance of trade; (3) the demand for cash balances; (4) induced substitution of labor; (5) demand for consumption goods; and (6) redistribution of income. Of these, Leontief does not treat (1) and (6), explicitly argues also on the basis of (3), (4), and (5), and implicitly includes (2).

A laborious notation of every omission, every misconceived statement, every example of over- or underestimation of importance, and every wrong assessment of the facts would make a formidable array against almost any economist, even those of greatest stature. Thus Keynes' tendency to belittle his predecessors and even to misrepresent their views has undoubtedly damaged his own reputation. His lashing out against Say's Law makes him seem ignorant of the fact that it was not designed by its author to shed light on economic fluctuations, and was not so employed by his own immediate predecessors. His own confusion as between *ex ante* and *ex post* led to a

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breakdown of reasoning in crucial passages in the *General Theory* and precipitated much blood-letting, when a clear statement of these contrasting (and reconcilable) views of saving and investment had been worked out by Myrdal, Ohlin, and other Swedish economists several years prior to the publication of Keynes' book. Involuntary employment is formally defined in terms of what Keynes thought to be a remedy; and the abstruseness of the language concealed the fact that this remedy was the Machiavellian device of watering down wages by inflation.

All of these are side issues. The significant question is: what in the *central theoretical body* of the *General Theory* now survives in a fairly intact form? The present volume gives additional evidence that a number of its most central ideas have been abandoned or reformulated to a state almost beyond recognition from the original. This holds true in pre-eminent degree of the thesis that a change in money wages cannot alter employment. As a matter of fact, the ways in which it *can* alter employment are so numerous as to cause the thesis to be altered to the form that wage-reduction cannot in many instances be relied upon to extend employment because the multiplicity of possible reactions makes the outcome obscure. By parity of reasoning, in some situations with a few conspicuous variables, the outcome (either way) might be predicted. This is no longer Keynes.

Much of the plausibility of under-employment equilibrium (or of an automatic *impasse* in the capitalistic system) came from Keynes' making L_2 ("speculative" balances) a function solely of anticipations as to the rate of interest. But in a depression people would behave irrationally if they expected interest rates to rise and if for this reason they absorbed money indefinitely. It is now definitely established that expectations as to capital *yields* are more important than expectations as to capital *costs*; and hence the holding of idle balances answers to all the multiplicity of forces usually discussed under "the lower turning point." This outcome is, again, quite alien to the few variables of the Keynesian system; and it may undermine the idea of under-employment *equilibrium* even with the introduction of substantially more variables.

It is usually said that Keynes' "marginal efficiency of capital" is the traditional productivity theory with the needed addition of emphasis upon anticipations. Actually, Keynes altered the productivity theory very radically, and in a direction favorable to underemployment (of capital or of labor, whichever suited the occasion), by the assumption of fixed techniques. Several authors in the present volume point out the arbitrariness of this assumption past a very short run. Thus another factor in addition to flexible real wages is rehabilitated from the "classical" limbo to permit factor substitution and equilibrium.

A fourth respect in which current judgments, reflected in the present volume, run quite counter to the central core of the *General Theory* pertains to the significance of the cost-price structure for such aggregates as output, savings, and employment. The central Keynesian system of five large variables has no place for the bearing of allocation of factors as it occurs in such manifold forms as the tax structure, the directions of public expenditure,

the role of monopoly *vs.* competition, the effect of inflation and deflation on productive efficiency, etc. Thus, much of the valuable yield of "classical" economics, business cycle theory, monetary theory, and the analysis of taxation is shut out in the particular macro-economic system of the *General Theory*. It is really far short of generality.

With the noteworthy exception of the consumption function (and multiplier) yet to be considered, the preceding points cover the formal Keynesian theorems. It is, I believe, not unfair to say that, however great the impulse given to economic theory by Keynes—and this beyond dispute—the formal theorems have been rejected or extensively modified. What then of the positive theoretical yield? Are there gains which would be as generally accepted as the corrections and negations appearing in *The New Economics*; and how important are they? I will not attempt to select "the" great contribution, for there are several and only the future will reveal their relative importance: the macro-economic approach, the effective introduction of income as a variable of primary importance, the degree to which interest rates respond to monetary forces, the effective demand aspect of wages, the possible miscarriage of savings. Some of these are matters of emphasis rather than theoretical discovery, but the emphasis virtually amounted to discovery. In the aggregate this is a very great yield, enough to support Keynes' reputation, great as it is, and great enough without effort to justify his errors.

Of the central theoretical core, virtually the only innovation which seems to meet with general acceptance is the consumption function (sometimes with, sometimes without, reference to the related multiplier). Harris regards it as an outstanding contribution (p. 26), Hansen as "epoch-making" (p. 135), Samuelson as vitally important (p. 159), Tinbergen and Higgins, as Keynes' main contribution (pp. 222, 564); and Haberler, while expressing the opinion that it is "overworked" and too rigidly formulated, thinks it represents a salutary shift of emphasis toward income (p. 166). Only Colm raises a note of scepticism, holding that the consumption function is less reliable for *predictions* than "sample studies of business and consumer attitudes" (pp. 460-61), an opinion expressed outside the present volume by Smithies.

But what is the consumption function? None of the writers just referred to defines or describes it, incidentally to bestowing praise. Hansen, indeed, explains that both the configuration *and* the shifts of the consumption function depend on income (pp. 138-39); and Tinbergen suggests that individual consumption expenditures are functions of "individual incomes, a number of price variables, the size of all families involved; and, perhaps, other factors" (p. 223). But it is not easy to see how these explanations illuminate the character of the function in most of the explanatory values assigned to it. Indeed, the consumption function seems to resemble the Holy Ghost: a derogatory attitude toward it is the ultimate sin, but precise information about it is hard to come by. Keynes' own statement of its properties, as given on page 190, follows: "It simply amounts to saying that an increase in income will be divided in some proportion or another between spending and saving, and that when our income is increased it is extremely unlikely

* Louis
in "Five
1946), p. 2

that this will have the effect of making us either spend less or save less than before." From these descriptions it is not clear how the consumption function, as Professor Harris says (p. 52), "helps to explain why all goods produced are not sold (as suggested by Say's Law); the declining marginal efficiency of capital; the theory of secular stagnation (Sweezy); the independence of changes in wage rates and employment (Tobin); the theory of the trade cycle (Metzler)."

Each of these may be the subject of some justifiable scepticism. Thus, (1) the failure of goods to be sold, a cyclical phenomenon, was coupled by Keynes himself with a collapse of the marginal efficiency of capital; and since *ex ante* investment more than makes up for the gap between income and consumption, it does not seem possible to derive a downturn from the lag of consumption except by appeal to the acceleration principle—but this is not the consumption function. (2) The declining marginal efficiency of capital could be explained by the consumption function only on the assumption of some "necessary" relation of investment to consumption. There is no such necessary relation; and Keynes himself, as Lintner emphasizes in the present volume, made fluctuations in autonomous investment, both in the *Treatise* and *General Theory*, to be the primary initiating cause of change (p. 523). (3) Statistical evidence does not suggest a secular decline of consumption relatively to income. But aside from this, the existence of "secular stagnation" is still a moot issue, as well as its theoretical foundation. In passing, Hansen did not appeal to the consumption function in his own explanations of stagnation. (4) This point may be dismissed, since Keynes did not connect the neutrality of money wages as to employment with the consumption function, and Tobin argues for the *dependence*, not independence as Harris says, of employment on wages. (5) The cyclical role of the consumption function is an involved issue. Some indication of the divergence of views on this subject may be gathered from a contrast of Metzler's belief that the upper and lower turning points are *explained* by the consumption function with Bean's view, which emphasizes "the business cycle in addition to disposable income as a *factor in determining* consumer expenditures (*italics supplied*)."⁶

The new economics, undoubtedly inspired by the influence of Keynes, is making rapid strides; but the rapid strides are fast leaving the *General Theory* behind. There has been a glorious revolution but, after the way of revolutions, it has both its glorious and its ignominious sides.

⁶ Louis H. Bean, "Relation of Disposable Income and the Business Cycle to Expenditure," in "Five Views on the Consumption Function," *Rev. Econ. Stat.*, Vol. XXVIII (Nov., 1946), p. 207.

EQUILIBRIUM OF THE FIRM

By RICHARD A. LESTER*

The articles by Professors R. A. Gordon and L. G. Reynolds in the June, 1948 issue of this *Review*¹ contribute considerably to clarification and resolution of some of the issues in what has come to be known as the "marginalist controversy." This note will be confined to comment on three matters discussed in those articles, *viz.*, the character of marginal variable costs, the nature of demand to the firm, and long-run goals of business management. They are all involved in a consideration of equilibrium of the firm.

I

On the assumption that a horizontal labor supply curve and constant supply prices for materials are the most common conditions, Professor Reynolds believes it "reasonable to expect constant marginal cost as the typical situation."² He suggests that my results indicating that business executives seem typically to think in terms of a downward-sloping, marginal variable cost curve up to designed capacity of the plant may be due to the possibility that the reporting executives included in their estimates certain groups of "semi-variable costs" such as "indirect labor." Undoubtedly many of them did.

In considering this question it is helpful to distinguish between changes in marginal variable cost that accompany (1) a decline in the scale of plant operations, (2) an increase in the scale that only involves more employment within the normal work week for employees that have continued to work or the re-employment of employees who had been laid off but a short period of time, and (3) an increase that necessitates the hiring of new employees, the recall of employees away from the job for a considerable period, or the purchase of additional overtime hours.

Plants are ordinarily designed and equipped so that at (or possibly even slightly above) capacity operations³ there should exist the most efficient flow

* The author is professor of economics at Princeton University.

¹ "Short-Period Price Determination in Theory and Practice," pp. 265-88, and "Toward a Short-Run Theory of Wages," pp. 289-308.

² *Loc. cit.*, p. 295.

³ Businessmen generally seem to think of plant capacity in physical terms, as equipment capacity with full-crew operations at some given standard, usually a level of achievement attained a number of times in the past and somewhat short of maximum conceivable output under ideal conditions with full-crew operations. It is the output for which the plant and equipment were designed, assuming some "normal" rate of efficiency and the regular number of shifts. That is the concept used here. Admittedly it is not as exact as one would desire. Presumably plant capacity so defined would vary somewhat with operating conditions such as the quality of materials, the product-mix, and the extent to which maintenance is temporarily deferred. Businessmen do not appear generally to think of capacity in the theorists' terms of the low point of the total unit cost curve, which would

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of materials, the most effective use of transport and other services, the best runs of a production item, and so forth. A general reduction in the scale of operations below capacity would usually mean more time on set-up operations per unit of output with shorter runs, transfer and less effective distribution of personnel (probably according to the seniority provisions of a labor agreement), and, often, reduced employee morale and perhaps output restriction to make the job last, as the result of lay-offs and part-time work.⁴ Consequently, the direct labor cost per unit of output would be likely to rise. Other less direct costs per unit of output would also tend to increase, such as the employer's unemployment-compensation tax rate under experience rating and his outlays for employee welfare or benefit plans per dollar of payroll. Furthermore, reduced plant output, if significant in size and continued any length of time, would mean smaller quantity purchases of electric power, materials, and parts, which usually would be at higher unit prices and at higher unit transportation and handling costs for supplies. Shorter runs are generally at higher unit costs for the parts supplier.

Although there are good grounds for believing that increasing variable unit costs frequently accompany a required reduction in the scale of plant operations below capacity (especially under a union contract with seniority governing lay-offs and transfers and with superseniority for shop stewards), not all of those grounds apply with equal force in the opposite direction. That is true even for an increase in operations toward plant capacity that would involve only reducing part-time employment or recalling recently laid-off employees. In the latter case, for example, numerous transfers of workers under the seniority provisions would undoubtedly be required, and one could hardly expect employee morale to increase above normal by as much as it might decline with curtailed operations. Also, with such matters as employee transfers and morale involved, the time element becomes significant. Unit marginal cost may be somewhat larger immediately after the reduction or increase in scale of plant operations occurs from what it would be after the reduction or increase had been in effect for a period of time. The dynamic aspects of unit variable costs are a relatively unexplored area.

II

The authors of the two articles point out that in the short run the businessman is more concerned with sales estimates at a given price than he is in the shape of the demand curve at any particular moment,⁵ and that over short

vary with the character of the labor force, overtime and other provisions of labor agreements, etc.

⁴The method of wage payment might make some difference. To the extent that hours of direct labor are paid at piece rates, labor costs would be constant per unit of output. However, even in piece-rate industries a considerable portion of direct labor cost in any one pay period will be paid for on a non-piece-rate basis (usually for work under non-standard conditions, for set-up operations and down-time, for new work before a piece rate is established, for jobs that do not lend themselves to the piece-rate method of payment, and for workers transferred from their regular jobs).

⁵Gordon, *loc. cit.*, p. 277.

periods the scale of output is based primarily on anticipated movements of demand, which are largely independent of the employer's price decisions or current cost conditions.⁶ That is the point I have stressed.⁷ Professor Reynolds adds in a footnote (p. 305) that the kinds of estimates which businessmen actually make, such as expected sales volume, output, and level of unit costs, are probably best visualized as single points on the price-quantity diagram, as they do not seem to think in terms of continuous curves or schedules.

In a recent note,⁸ I discussed the absence of subjective demand schedules for firms that persistently conform to the price leadership of other firms or that produce items whose price remains unchanged for a number of years. For such firms, the selling prices of products are assumed by the management to be determined by factors outside the control of that firm. It is obvious that price-following firms and producers of articles with customary and constant prices do not frequently and seriously speculate regarding the elasticity of demand to the firm for each of its products. The terms "point demand" or "single-quantity demand" can be used to characterize subjective demand as visualized by a price follower or a fixed-price producer for a particular time interval. An executive in such a firm thinks in terms of the expected sales of each of his products distributed over time intervals, a certain total for the next week, month, or quarter, another total for the succeeding interval, and so forth, over the ensuing year or whatever his short-run planning period may be. For each interval of the planning period he anticipates a certain amount, or, less likely, his estimates may take the form of a range, with different probabilities for various areas within the range. Such interval estimates may, of course, be revised as experience indicates.

A demand curve cannot be derived by connecting the series of weekly, monthly, or quarterly point demands, nor can one consider as a demand curve a range of estimated possible sales for any one time interval, or the path of any alterations in the estimates of demand for a particular interval, or the difference between expected sales and later realized sales for a time interval.

It has been contended that, instead of a point, the demand to (say) a price-following firm should be considered to be a schedule in the form of a straight horizontal line at the given price and extending in both directions from the firm's estimated quantity of sales for a time interval. That, however, is unwarranted. It assumes that the management is thinking in terms of having orders in excess of expectations or of refusing to accept varying amounts of expected sales, which certainly would not be likely unless it was operating at or above the designed capacity of its own plant facilities and could not contract out the work except at a money loss or with some deterioration in quality of product. As businessmen aver, the management of each firm in a manufacturing industry strives to maintain or improve the firm's market

⁶ Reynolds, *loc. cit.*, pp. 297 and 304.

⁷ See, "Marginalism, Minimum Wages, and Labor Markets," *Am. Econ. Rev.*, Vol. XXXVII, No. 1 (March, 1947), pp. 138 and 148.

⁸ "Absence of Elasticity Considerations in Demand to the Firm," *Southern Econ. Jour.*, Vol. XIV (Jan., 1948), pp. 285-89.

position, usually measured by the percentage that its sales bear to total sales of the product in the markets where the firm is one of the suppliers. A management would not think of deliberately sacrificing its market position by refusing offered business; manufacturers have learned that loss of position for any reason, including lack of capacity in boom times, is usually difficult and costly to recover later.

From time to time a firm may, of course, change with respect to one or more of its products from a condition of point demand to some sort of schedule of demand and vice versa. The prices of even price leaders may be fairly fixed over short periods of time, such as a "season" or "model year." Manufacturers of such branded items as men's and women's clothing, household electrical equipment, automobiles, construction machinery, and numerous "catalogue" items, normally may not anticipate or consider any change of price during a period of at least six months to a year. Customarily the period of any price change for them may be only a minor fraction of the year, during which only one set of price changes occurs. For the remainder of the year, a condition of point demand may prevail.

The management of a firm may, when pressed by rising costs, shortage of liquid assets, or loss of market position, begin to consider the possibility or necessity of price cutting, including secret concessions from its quoted prices. Whenever the management begins to include the possibility of relative price changes on its part in its planning, it is, so to speak, shifting from point demand to some sort of demand schedule. Instead of price change, however, the management may seek to meet its difficulties by non-price means such as improved sales methods, shifting output between price and product lines so as to increase its sales in lines likely to be most favorable, redesigning its products, or reducing costs per unit of output by such means as improvement in the flow of materials and in the scheduling of production, better use and control of inventory, development of improved production methods and equipment, reduction in material costs of products through content changes, and simplification of paper work. The large possibilities of cost cutting and increasing income without price changes are common knowledge to persons well acquainted with industry but are generally neglected by theorists who reason in rigid, mechanistic terms and disregard human nature. If managements think in terms of making adjustments exclusive of price change, subjective demand for each item may continue to be of the point rather than the schedule variety.

III

The concept of point demand, in conjunction with decreasing (or even constant) marginal variable cost up to and beyond normal plant capacity, would seem to require significant revision of notions regarding equilibrium of the firm. It is doubtful whether business executives generally think, plan, or act in terms of a single equilibrium point, determined separately for each item of production.

One might assume that, under decreasing or constant marginal variable costs and point demand, equilibrium would be at the point of plant capacity.

On testimony of business executives that, however, is questionable. For example, Mr. Frank D. Newbury, former vice president and director of the Westinghouse Electric Company, states that an increasing total unit cost curve between 100 and 120 per cent capacity would be rare in mechanized industry because any increase in unit variable cost that was large enough to more than offset the reduced overhead per unit would be "extraordinary, and would represent inexcusably poor management."⁹

It seems likely that total unit costs are often fairly constant over a range of output, say from 95 to 110 per cent of plant capacity.¹⁰ That might be considered an equilibrium zone in the sense that, within that area, the firm's management would consider its operations satisfactory or reasonably profitable; it would not feel pressed to move outside the zone or to attempt to influence sales so that the firm would arrive at any particular point within the zone. Incidentally, firms will not normally offend respectable customers by rejecting their business, so that there is no regular stopping point beyond which the firm refuses business on the grounds that it is less profitable or even unprofitable. And, under point demand, it would not attempt to keep output at some "equilibrium point" through price manipulations.

In general, the area of satisfactory operations for a company would, on the vertical price scale, be somewhat above the total unit cost curve and, on the output scale, would lie within a range of high outputs. Of course the size and shape of such an "equilibrium zone" would vary from firm to firm and from time to time for the same firm. Whether a firm at any particular time was operating within its satisfactory zone would in large measure be determined by actual and expected demand for its products. Below and to the left of the satisfactory zone would be areas of progressively less satisfactory operations. Generally, a management's efforts both for greater sales and reduced costs would become more energetic, even desperate, the further the rate of production fell below its satisfactory range and also the more the firm was losing its position in various markets to competitors.

The discussion so far has concerned short-run equilibrium. It is proposed that for many companies and conditions the mathematical or mechanistic concept of point equilibrium be replaced by the psychological notion of current and prospective operations within a satisfactory zone. Temporary, short-run equilibrium positions or areas are conceivable outside the satisfactory zone, if the firm's management believes that it is doing the best it can under the circumstances, taking into account such factors as how the firm stands relative to its competitors, what financial pressures are affecting it, and conventions in the industry. For reasons of liquidity or strategy or for

⁹From correspondence and mimeographed material supplied by Mr. Newbury. In contending that total unit costs continue to decline well beyond plant capacity, he points out that plant capacity usually is not a precise figure and that maximum possible output is influenced by such factors as the physical capacity of the major equipment, the actual product-mix, shift and overtime arrangements, and the ability of management to correct bottlenecks as they arise.

¹⁰The possibility of operations at 110 per cent of capacity exists in part because of the definition of capacity adopted in footnote 3 and circumstances mentioned in footnote 9.

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current lack of resources, the management may, for the time being, not favor engaging the firm in additional actions and expense to increase its share in the total sales of the industry, although continuing unabated and with an increased sense of urgency such activities as product research, planning to improve sales, and the search for savings in cost.

Some brief comments now on long-run equilibrium. As the primary, long-run objective, especially of mature, successful firms, Professor Gordon suggests "satisfactory profits," as vague as that criterion is," and a safe financial position.¹¹ My investigations lead to the conclusion that, instead of a single, long-run objective, business managements pursue simultaneously or successively a number of goals, which are not completely consistent with one another. The order of priority may vary from time to time, perhaps changing with conditions facing the firm, so that new balances may have to be drawn between conflicting goals. A list of such goals might include the following: "satisfactory" or "reasonable" profits, maximum possible profits, security and convenience of the existing management, achievement and maintenance of sufficient liquidity to assure the firm's financial safety, and maintenance of the firm's market position or its established share of the industry's total sales.¹²

The particular goals and the management's strength of desire to attain them may vary with the age and degree of maturity of the firm, the management, and the industry; with the extent and kinds of pressure from stockholders, creditors, and labor; and with the attitudes of the community, the customers, the suppliers, the employees, and competitors toward the firm and its management. Attitudes, supported by organizational influences and pressures, may be very influential, especially where the management is sensitive to outside opinion and seeks to avoid difficulties for itself.

It might be contended that some of the goals in the list are means of achieving others rather than themselves being primary objectives. Illustrations of possible conflicts between them indicate, however, that frequently that is not the case. The management of a firm may consider it unwise to have it make a profit beyond a certain total or percentage of stockholders' investment in any one year. That may be because maximum possible profits would result in adverse publicity, would encourage organized labor to use the firm as a wage leader, might lead to governmental investigation and prosecution of the management, or might have some other effects that the management, for non-profit reasons, desires to avoid. Adequate liquidity may be purchased at the continued expense of the possibility of greater profits. The management of a firm may strive to maintain its position and prestige in an industry even though the dropping of some unprofitable lines would promise an indefinite increase in the rate of profit on owners' equity. Insufficient emphasis has

¹¹ *Loc. cit.*, p. 271; see also pp. 275 and 284. Professor Reynolds remarks: "There may be little interest in *maximum* profits so long as actual profits are up to conventional standards" (*loc. cit.*, p. 298).

¹² Professor Gordon refers to some of these as subordinate objectives, although he conceives of them as often independent of the primary objective and he seems to imply that at times they might take precedence over the criterion of profits.

been placed on maintenance of a firm's market position and prevention of any decline in its relative status as an independent motivating force, influencing a company's policies with respect to sales, output, and investment.

Multiplicity of and varying priority in the long-run goals on a firm make all the more questionable the notion of short-run equilibrium at a point uniquely determined, and lend support to the concept of an equilibrium zone or area. Incidentally, some fairly obvious similarities exist between a long-run goal of "satisfactory" profits and short-run zone of satisfactory operations.

The conceptions of long- and short-run equilibrium outlined here may seem so vague and indefinite as to rob the notion of equilibrium of the firm of much of its analytical usefulness. If one is thinking in terms of mathematical precision and manipulation, that may to some extent be true. This psychological approach in terms of management satisfaction and dissatisfaction does, however, appear to conform rather closely to the pattern of business thinking and practice and seems to offer possibilities of fruitful development through empirical investigation. By broadening and shifting the base of analysis it may help to provide keys for a number of doors that until now have remained unlocked.

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THE NEW BRITISH LAW ON MONOPOLY

By RUTH COHEN*

The British Monopolies and Restrictive Practises (Inquiry and Control) Act passed the British Parliament, unopposed on its main points, in the summer of 1948. It is the first British statute since the Statute of Monopolies in 1624 for the regulation of monopoly in general (as distinct from the control of the "natural" public utility monopolies). Previously, monopolies were only subject to such control as was provided by the common law. Under this, certain contracts in restraint of trade are illegal and unenforceable; but the exceptions are so large, and the interpretation of the law has been so favourable to agreements that there remain, probably, few monopolistic practises except the most obviously outrageous which are illegal and not many which cannot be so drawn as to be enforceable at law.

This article first outlines the main provisions of the new act and then comments on some of the points of policy involved.

The long title of the act reads "an Act to make provision for inquiry into the existence and effects of, and for dealing with mischiefs resulting from, or arising in connection with, any conditions of monopoly or restriction or other analogous conditions prevailing as respects the supply of, or the application of any process to, goods, buildings or structures, or as respects exports."

The act applies when one-third or more of goods of any description in the United Kingdom or a substantial part of it is supplied, bought or processed, either by or to one person (or by or to interconnected corporations) or by or to two or more persons who have a tacit or expressed arrangement to limit competition in any way in the particular trade. It applies also if, by agreement or arrangement, goods of a particular description are not supplied at all in the country or a substantial part of it (Clauses 3 and 4). Finally it applies to exports, either as a whole or to particular markets, if one-third of British production is in one firm's hands, or subject to arrangements to limit competition (Clause 5). Agreements dealing with wages and employment are exempt from the provisions of the act (Clauses 3, 4, and 5).

A Commission is to be set up, consisting of not less than four nor more than ten persons appointed by the Board of Trade. The normal period of office for any member is intended to be five years, but a member can be reappointed for one further period (Clause 1). This Commission is to examine cases referred to it by the Board of Trade, selected from among those to which it appears the act applies. The Board may not refer cases where the arrangements have been expressly authorized by law (*e.g.*, nationalised industries, Agricultural Marketing Boards). But the Commission may be asked to assist the Board in considering any matter to which this act applies, whether the ar-

* The author is a fellow of and a University lecturer in economics at Newnham College, Cambridge, England.

rangement in question has been authorised by law or not (Clause 2).

The Board of Trade may refer cases to the Commission in either of two ways: (a) it may limit the investigation and report to the facts, that is to say, to whether the conditions to which the act applies in fact prevail for the goods in question, and if so how and to what extent, and to the actions which the parties concerned take as a result of or in order to preserve those conditions; or (b) it may require investigation and report on both the facts and on whether the situation reported operates, or may be expected to operate, against the public interest (Clause 6). (An attempt, discussed later in this article, is made to define "the public interest" [Clause 14]).

The Commission must report unequivocally and, where the investigation is not confined to the facts, may suggest action, to be taken by Ministers, government departments or the parties concerned, to remedy or prevent anything which, in its view, operates against the public interest. If any member of the Commission dissents from the majority on a reference not confined to investigation of the facts, he may include his views in the report (Clause 7).

Later the Board may ask the Commission to report on how far any remedial action it proposed to the parties concerned is being carried out (Clause 12).

References to the Commission must be published (Clause 6), and the Commission's report must be laid before Parliament if it was not limited to the facts, subject to a security safeguard and to the possibility of suppressing information which substantially damages "legitimate business interests" and which is not vital to the argument of the report. The Board of Trade may decide whether or not to lay before Parliament reports confined to the facts (Clause 9). The Board must also lay annually before Parliament a report reviewing suggestions and requests for reference of matters to the Commission, provided these do not appear to be frivolous (Clause 16).

Finally the Board may ask the Commission for a report on the general effect on the public interest of particular monopolistic and restrictive practices, provided the Commission has dealt with such practises in relation to particular goods in earlier reports (Clause 15).

Some new sanctions are provided, in addition to those, such as price control, that Ministers already possess (Clause 13). "Competent authorities" (that is to say, the Ministers responsible for different industries [Clause 20]) are given power to prohibit by Order the making or carrying out of agreements, and to prohibit boycotts, conditional sales, and preferential terms. These Orders must not interfere with patent rights. Orders so made must be laid in draft before Parliament and approved by resolution of each House (a far shorter procedure than an act of Parliament). They can only be made if, on a reference not confined to the facts, the Commission has reported that the conditions to which the act applies prevail, and *either* the Commission has reported them against the public interest, *or* the House of Commons by resolution so decides (Clause 10).

No criminal proceedings can be brought under the act, but either the Crown or any person affected may bring civil proceedings for an injunction to stop the action prohibited or for any other appropriate relief. The Trades Disputes

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Act of 1906 is not to apply to such proceedings (Clause 11). (This act prohibits any actions of tort against a trade union; and the term trade union in law includes many associations between master and master).

These are the main provisions of the new act. It is at once apparent that it is not a drastic measure. Although some new sanctions are provided for "dealing with mischiefs" (to take the words of the long title) and some hints have been given that existing powers, for instance of price control, may be used to control monopolies, greater emphasis, both in the act itself and in the debates while it was discussed in the House of Commons, was laid on "inquiry," and on the publicity which will follow it.

The philosophy behind the act is still that expressed in the White Paper on Employment Policy published in the spring of 1945 by the coalition government:¹ "... agreements . . . to control prices and output, to divide markets and to fix conditions of sale . . . or combines do not necessarily operate against the public interest, but the power to do so is there." In addition, it is held that insufficient information exists on the operation of monopolies and restrictive practices, and that only a detailed examination of each can bring out whether or not it works against the public interest. This for the present; but later, as the Commission develops experience, the government (though not the Opposition) holds that it can usefully pronounce on the merits or demerits of particular types of restrictive practise, as a guide to business and the public.

The task before the Commission is a formidable one. First, it must interpret the public interest. It has, to guide it, the definition introduced into the Bill at third reading:

... all matters which appear in the particular circumstances to be relevant shall be taken into account and, amongst other things, regard shall be had to the need, consistently with the general economic position of the United Kingdom, to achieve:

(a) the production, treatment and distribution by the most efficient and economical means of goods of such types and qualities, in such volume and at such prices as will best meet the requirements of home and overseas markets;

(b) the organisation of industry and trade in such a way that their efficiency is progressively increased and new enterprise is encouraged;

(c) the fullest use and best distribution of men, materials and industrial capacity in the United Kingdom; and

(d) the development of technical improvements and the expansion of existing markets and the opening up of new markets.

All this is admirable. But it does not get the Commission very far. How is it to decide, for instance, whether or not to approve restrictive practises designed to maintain some rate of return on capital in a declining industry which, under competition, would work with no margin over prime costs? Prices above prime costs but below total costs could not be regarded as extortionate; but the capital already invested in the industry would be more fully used if prices were kept down. Again, when, if at all, should it

¹ Cmd. 6527.

permit the division of markets? Economists may think they know the answer to these questions. But not all economists would agree on all of them. And certainly economists would often disagree with businessmen or accountants.

The sort of difference of opinion that may arise is illustrated by two recent reports of committees of enquiry. One dealt with cement, the other with building materials and components generally. Both examined the system of fixed minimum prices and of deferred rebates to merchants which are forfeited if the merchant deals with any manufacturers outside the agreement. The first committee found that the price system as a whole was not an unsound one and that there was "sufficient bargaining power between the manufacturers and those interested in the rebates to make it right to leave these matters for adjustment between the interested parties."² The second found these practices to be "not in the national interest" and regarded it as essential that they should be eliminated.³ (It should perhaps be added that there was an economist on the second committee but not on the first.)

It is not, of course, true to say that the Commission will be left quite as unassisted in interpreting the public interest as were the various prewar bodies set up to supervise or comment on the actions of different statutory monopolies. It is told that production should be "by the most efficient and economical means" and that organisation must be such that "efficiency is progressively increased and new enterprise is encouraged." Presumably this should rule out the exclusion of newcomers and the organisation of restriction schemes which, like the Rubber Restriction Scheme in Malaya, benefited the high-cost producers (the plantation producers) at the expense of the low-cost native producers.

Both the government and the opposition realised the difficulty and the importance of the task entrusted to the Commission. The President of the Board of Trade said that he was determined to seek good members of the Commission. Some might be full time but others would be part time, persons already holding responsible positions which they did not wish to give up.

The task of interpreting public interest is thus left mainly to the Commission. But not wholly. As stated earlier, the act permits the House of Commons by resolution to decide that actions taken are against the public interest even though the Commission has decided otherwise. This clause was strongly opposed by the opposition, on the grounds, mainly, that it introduced politics unnecessarily, and that the Commission's findings should only be over-ruled by an act of Parliament, involving several full debates in Parliament. The decisions involved are major decisions, and controversial ones; it is difficult to see how, in the absence of a statement in the act of what type of monopolistic practises should be regarded as against the public interest, the matter can be wholly left to the Commission. And it is difficult to find time in Parliament for new Bills and several debates.

The task is formidable for a second reason, the number of cases to be

² *Cement Costs—Report by the Committee appointed by the Minister of Works.* H.M.S.O. 1947, pp. 21 and 22.

³ *The Distribution of Building Materials and Components. Report of the Committee of Enquiry, appointed by the Minister of Works.* H.M.S.O. 1948, pp. 21-26.

surveyed. Monopoly and restrictive practises in the sense defined by the act are very numerous indeed in British industry. Under the act, it is clear, progress in examining them all will be very slow. And it is far from clear that the sanctions provided in the act or by other legislation will always be adequate to ensure that actions decided by the Commission or the House of Commons to be against the public interest will be prevented in future. Monopolistic agreements can be terminated or forbidden, and boycotts, conditional sales and preferential terms prohibited. This may be adequate for the cartel type of monopoly, where firms maintain their separate identities. But it only touches the fringe of the problem presented by dominating firms or trusts. These fix their own prices and output, and can do so in a monopolistic fashion without any agreement. For these there remains, perhaps, the sanction of price control. But it is precisely in dealing with monopolies of this sort that price control (never a very effective sanction) becomes most ineffectual. Such control must be based in some way on costs; and the only costs available to be measured are those of the dominating firm. Either the firm is encouraged to keep up its costs, and thus the imposed price; or it is allowed to retain part or all of any profits resulting from lower costs, and the control gradually becomes inoperative.

Reliance has therefore to be placed on publicity, and on a change in the attitude of industrialists towards monopoly as the Commission pronounces on individual cases and gives a lead on policy. It is here that must lie the greatest hope of speedy action. The Commission cannot itself examine many cases a year. But if its decisions on one case influence the actions of a large number of businesses not themselves examined, it may affect many monopolies.

The Commission will have plenty of work within the framework of the act. None the less, it is perhaps unfortunate that cases of monopoly expressly authorised by law may not be referred to it. These fall into two broad groups, the nationalised industries, which have absorbed many of the large public utility monopolies, and agreements among privately owned firms authorised by statute. The opposition strongly urged that nationalised industries should be subject to an "efficiency audit" by the Commission. But this is a different task from that of seeing that the desire for private profit does not damage the public interest. It therefore seems reasonable not to place this considerable extra burden on the Commission.

On the other hand, privately owned firms or industries which are placed by law in a monopoly position present many of the same sorts of problems as other privately owned monopolies. The expertise which the Commission acquires in studying the latter should be useful in dealing with the former. Probably the most important of this type of monopoly before the war were the Agricultural Marketing Boards. At present most of their prewar functions are exercised by the Ministry of Food. The government is to produce a Bill about their future. If they are to be perpetuated, it may be hoped that their activities will be subject to investigation by the Commission rather than by the somewhat ineffectual and powerless Committees which had this task before the war.

The work of the Commission may lead to further legislation as experience develops.

It would seem that the only practicable alternative policy is to prohibit certain practises, either completely or except under license. It is not necessary to go as far as has American legislation. For instance, combines or trusts can be permitted as being often, at any rate under British conditions, more efficient than the imperfect competition which would result were they broken up. That would leave unsolved the problem of controlling them. A prohibition policy would involve a major decision. Possibly public opinion in this country is not ready; possibly again the Commission may succeed as its experience grows in selecting exactly what practises should be prohibited and with what exceptions; certainly no such policy could have been passed through Parliament with the agreement of the opposition.

These seem the main issues raised by the new act. Is the policy drastic enough? How is the Commission to interpret the public interest? Should the scope of its enquiries be extended?

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COMMUNICATIONS

The Foreign-Trade Multiplier, The Propensity to Import and Balance-of-Payments Equilibrium

What may be a formal error in an article of mine¹ has come in for attack in literature in international economics which has belatedly come to my attention.² The present communication is designed to make confession to deviationism, if not to error in a formal sense; to enter a defense that the position taken conforms to the real world if not to the mechanics of the most popular economic models; and to suggest that neither my critics nor I have probed deeply enough into the subject.

The "error" appears in a discussion of the equilibrating mechanism in the balance of payments of a country with a high foreign-trade multiplier and a high propensity to import *vis-à-vis* a country with a low foreign-trade multiplier and a low propensity to import. A large increase in exports of the former was postulated. It was pointed out that incomes would rise substantially and that this would produce effects in turn on imports. The sentence which attracted the unfavorable attention started with the words: "This rise in imports may be larger than the increase in exports which prompted it. . . ."

The general law laid down by Samuelson, which he asserts is overlooked by many economic writers, reads: "So long as some fraction of income at every stage is leaking into domestic savings, a new dollar of exports will never be able to lift income by enough to call forth a full dollar of new imports."³

¹"International Monetary Stabilization," in S. E. Harris, ed., *Postwar Economic Problems* (New York, McGraw-Hill, 1943), pp. 375 *et seq.*

²My "defective argument" is attacked explicitly in S. Enke and V. Salera, *International Economics* (New York, Prentice-Hall, 1947), Chap. 31, esp. pp. 599 to 606. It may be noted that the authors expressed their gratitude to A. I. Bloomfield for the basic ideas involved in their discussion. Bloomfield has been kind enough to show me the typescript of his forthcoming *Capital Imports and the Balance of Payments, 1934-39*, which contains a substantial footnote in Chapter 9 devoted to the demolition of my argument.

It has been suggested to me, moreover, that I represent the "many economic writers" who have overlooked the general rule set forth by P. A. Samuelson in his *Economics* (New York, McGraw-Hill, 1948), p. 392. L. A. Metzler, who charged me with error verbally upon the appearance of the article when neither of us had sufficient leisure to discuss it, may also have had the point in mind in making his contrary positive statement in "The Theory of International Trade," in H. S. Ellis, ed., *A Survey of Contemporary Economics* (Philadelphia, Blakiston, 1948), p. 215.

In addition to the foregoing, it was a common occurrence during the portion of the war I spent in Washington to be stopped on the street by fellow economists and to be told that my argument had been demolished by their graduate students.

³That this is not an entirely accurate way of stating the point is understandable in an elementary textbook. What Samuelson means, of course, is, "So long as some fraction of income at every stage is leaking into savings and *no induced increase in home investment*

Enke and Salera list the foregoing among the reasons which prevent an increase in exports from calling forth a larger increase in imports and clinch their case by adding that "there is scarcely any case where the marginal propensity to save is not a positive quantity."⁴

The deviationism to which I am prepared to confess consists in the fact that I was talking not about the economic models discussed by Machlup in his *International Trade and the National Income Multiplier*⁵ but about the behavior of real economies. In Machlup's models, for example, the increase in exports (or other primary disbursements) must be sustained. "This technique does not deal with the effects of a single dose. . . ."⁶ It is also assumed that home investment is entirely unaffected by the changes in foreign trade as well as by the changes in income which may result from foreign trade.⁷ Nurkse chafes at the restraint imposed by this assumption.⁸ But given his assumptions, Machlup's models and his discussion of what the multiplier will and will not do are of high pedagogic value. Machlup admits that "... objections may indeed discredit the theory insofar as its application to concrete situations is concerned."⁹

The case I had in mind in suggesting that the combination of a high foreign trade multiplier and a high propensity to import might overcompensate for a favorable balance of payments was the Argentine example of 1936-38. In the fall of 1936, the failure of the American corn crop and a tight grain position in Europe called forth large corn exports from Argentina at good prices. Income in Argentina rose. The Argentine central-bank authorities attempted to use the afflux of foreign exchange to repay foreign debt owed in New York and shortly to become due. The inexorable rise in imports, subsiding only slowly long after the export position had returned to the *status quo ante* (and had even deteriorated) eventually required the Argentine authorities to enter into new loans in the New York market.¹⁰

Arthur Smithies has suggested to me that the Australian economy tends to behave in the same way that the Argentine economy did during this period; increases in exports generate surpluses in the current account which subsequently give way to deficits. Cursory examination of merchandise-trade

occurs, or so long as the volume of income leaking into savings exceeds induced increases in home investment, a new dollar of exports, etc."

⁴ *Op. cit.*, p. 601.

⁵ Philadelphia, Blakiston, 1943, *passim*.

⁶ *Ibid.*, p. 7.

⁷ *Ibid.*, p. 19.

⁸ In his "Domestic and International Equilibrium" in *The New Economics*, S. E. Harris, ed. (New York, Knopf, 1938), p. 267. It may be noted that Nurkse and Metzler both postulate the possibility that the action of the foreign-trade multiplier and the propensity to import may use up the foreign-exchange surplus initially created by the autonomous increase in exports. They, therefore, either belong to the group of writers which have overlooked the general law enunciated by Samuelson or disagree with Bloomfield and Salera as to the possibilities of the propensity to save being zero.

⁹ *Op. cit.*, p. 9.

¹⁰ The position can be illustrated concisely by the following figures from the League of Nations, *Balance of Payments*, 1938:

figures for the same period as in the Argentine case suggests a closely parallel behavior. Imports in this instance failed to turn downward in the same year as exports.¹¹

It might be argued that the figures showed simply the effects of alternate rising prosperity and depression in the United States as effected through the 1936-37 inventory boom and the subsequent slump. The reaction of changes in exports on imports through income would then be so slow or incomplete¹² as to produce balance-of-payments surpluses abroad in times of American prosperity and deficits in depression. I do not think so, though the evidence is worth more detailed investigation. In the Australian case, imports continued to rise after exports had turned down moderately. In the Argentine, imports of machinery continued to rise in 1938 after exports had fallen drastically. In my judgment, negative savings within the countries (or in-

ARGENTINE BALANCE OF PAYMENTS IN CURRENT ACCOUNT (LESS GOLD)
(in millions of pesos)

	<i>Credits</i>	<i>Debits</i>	<i>Balance</i>
1935	1774	1760	+14
1936	1900	1783	+117
1937	2531	2213	+317
1938	1540	2051	-511

Further investigation into the detailed figures on a monthly basis might be rewarding. A chart in League of Nations, *Review of World Trade*, 1938, p. 26, shows that the increase in exports was concentrated in the last half of 1936 and first half of 1937, and that imports were much higher in relation to exports after mid-1937 than before. The *Review* further points out that imports of machinery into the Argentine, which had been two-thirds higher in 1937 than in 1946, rose by another 31 per cent in 1938. This suggests that home investment was taking place on an increasing scale.

¹¹ From the *Review of World Trade*, 1938. Balance-of-payments figures comparable to those used for Argentina are not readily available in the League of Nations material for 1938. Debits, moreover, contain a large and sluggish item of interests and dividends.

AUSTRALIAN MERCHANDISE TRADE
(in millions of old gold dollars)

	<i>Exports</i>	<i>Imports</i>	<i>Balance</i>
1935	264.7	226.4	+37.3
1936	301.9	256.2	+45.7
1937	347.9	296.8	+50.1
1938	306.0	305.0	+1.0

With a merchandise-trade surplus of only \$1.0 millions old gold dollars, the total Australian current account was sharply deficitary. Indeed, the account was in deficit in all four years above.

¹² See Metzler, *op. cit.*, pp. 219-20, who states: "While some difference of opinion still exists concerning the role of induced investment, the conclusion of most economists seems to be that, except under unusual conditions, the adjustment of a country's balance of payments by means of income movements is likely to be incomplete."

I would agree that conclusions must be tentative (as indeed was my original statement). I am inclined to think, however, that in the present stage of economic development of a number of countries in the world, the operation of the foreign-trade multiplier (*cum* induced home investment) and the propensity to import may tend to produce an incomplete adjustment to decreases in exports and an overcomplete adjustment to increases.

duced investment) prolonged the adjustment to the rise in exports. I would not, however, expect a ready and complete adjustment to a decline in exports.

I fail to find it strange that the savings function of a country may be negative under certain dynamic conditions. It is true that, in general, individuals tend to save more as incomes increase. But at certain stages in rising standards of living, both secularly and during the cycle, savings in certain income groups may become negative as individuals go into debt to purchase durable goods pertaining to a higher standard of living. Such action can take place in response to an increase in income. Growing companies may expand their borrowing at certain points in their history in response to an increase in net revenue. Similarly, it may be that countries, whether deliberately in planned fashion, or through the agglomeration of thousands of individual decisions, may live above their means for a time in response to an increase in income. This type of response, when capital is not available for borrowing from abroad, may lead to a severe loss of reserves of gold and foreign exchange.

The Bloomfield-Enke and Salera argument that this thesis cannot be true because its converse cannot be demonstrated is based on novel if fallacious logic. I would answer that it is possible to regard the demand for commodities in international trade as elastic with respect to increases in incomes and inelastic with respect to decreases. This proposition is familiar enough in this country, where luxuries have a habit of becoming necessities. *Ab initio*, of course, a decline in exports cannot produce a drastic decline in income and commodities for which the demand is elastic if imports of the latter at this standard of living are small. An increase in exports, on the other hand, could produce a large increase in these classes of imports.

While I must insist on the validity of the point as made in my original article, I am prepared to negotiate on a generous basis with any critic who chooses to contend that its importance was exaggerated.

C. P. KINDLEBERGER*

* The author is associate professor of economics at Massachusetts Institute of Technology.

Central Banks and the State: A Comment

In a recent issue of the *Review*, Mr. Kriz traces, with extensive and useful documentation, the increasing subordination of central banks to Treasuries.¹ With full recognition of Mr. Kriz's material contribution, he fails to bring out what may be the most important aspect of this continuous reduction in the independence of central banks.

A generation ago, the quantity of money was widely believed to be related precisely and immediately to the price level. This influence on the price level, of course, was viewed as one of the leading factors in maintaining the general economic health of the economy. There were, to be sure, many dissenters from this extreme view but in the area of public policy formation it was dominant. Thus, when central banks inherited, assumed, or were assigned

¹ M. A. Kriz, "Central Banks and the State Today," *Am. Econ. Rev.*, Vol. XXXVIII, No. 4 (Sept., 1948), pp. 565-80.

monetary powers, this prestige was bound to be great. And because of the vast importance attached to these powers, it was felt that central banks should be insulated from the more direct impact of current politics to safeguard the exercise of these monetary powers.

But the more dogmatic quantity-of-money views have lost their standing. While it would be wrong to say that fiscal policy has displaced monetary policy in professional and popular regard, there has undeniably been a large shift in this direction. Certainly small monetary actions and moderate changes in the quantity of money are no longer regarded as important as they once were. On the other hand, small fiscal operations, quarterly tax payment dates, for example, have been given increasing attention in the analysis of current economic conditions. But in the administrative branch of government, fiscal matters have always been in the province of the Treasury. Thus, with no change in the distribution of formal powers, the change in the evaluation of powers demoted central banks relatively and at the same time raised the prestige of Treasuries.

In these circumstances, it is fairly obvious (and clearly true in practice) that when there tends to be a conflict of monetary and fiscal considerations, the fiscal ones take priority, the monetary ones give way.

It was not just the growth of public debt or its absolute size that accounted for greater importance of Treasuries; it was that public debt management came to have more aspects of monetary management. It was through the channel of public debt that Treasuries came to have a much greater voice in monetary matters. Fiscal effects do not end with the determination of the size of the public debt; the matter of how the debt is financed is of almost equal importance. When public debt is financed through the banking system, the results are relatively inflationary (to the extent there is any residual truth in quantity-of-money influences). Financing by sale of public debt obligations to the non-banking public is as such deflationary, and might undo some of the expansionary effect of the deficit spending.

Mr. Kriz is right in averring that the decline of the international gold standard was one of the leading factors shifting the balance of authority between central banks and Treasuries. As long as the gold standard prevailed (and more important as long as the logic of automaticity that it implied was accepted by the financial community), the action of the central bank in protecting its own gold reserves was identified with the public interest. But when faith in automaticity was shaken and when the international gold standard was no longer general, central banks were without the tools or the logic for international monetary action. Their future actions are most likely to put domestic considerations ahead of international ones, except in case of war. An action such as the increase in discount rates in the midst of a deep depression by the Federal Reserve System in September, 1931 when England departed from the gold standard, a case of putting gold standard considerations ahead of domestic economic needs, probably will never take place again.

But Mr. Kriz could have made this international point even more emphatic. The nature of international relations has itself changed. The ends of international economic policy are now seldom economic ones; they are more often

political or even military. When the governments of powerful nations are scrambling in the world arena for position and prestige, it becomes unthinkable that the central banks of any one of them should stand out against their governments. It is not so much that central banks have, in this connection at least, lost place *vis-à-vis* Treasuries; but rather that both have been forced to look less to economic ends in matters of international policy and more to other factors.

In any event, once the logic of automaticity in monetary policy is lost and the ideas of monetary management creep in, it is unthinkable that the agency exercising the powers of monetary management would be independent of government. In fact, the political independence of central banks was mainly a goal of those who hoped either by adherence to the domestic gold standard or by inviolate legislative rules to make money supply a function of rule and not of administrative authority. The question of whether the administrative authority was the central bank or the Treasury was far less important.

One final exception may be taken to Mr. Kriz. He lists the Federal Reserve banks as owned by the "private" member banks. Strictly speaking, he is right but to direct attention to this aspect of Federal Reserve organization is to misconstrue the facts. The balance of major authority in the System proves it to be a "public" agency.

Particularly since the Banking Act of 1935, the balance of power within the System has been clearly on the side of the central organ of the system: the Board of Governors. This Board is clearly an agency of the federal government. Its membership is appointed by the President with the advice and consent of the Senate. Although the Board has avoided partisanship in the narrower sense, it is clearly "political" in the better sense of the word. The chairman of the Board serves a four-year term, but in practice though not in law, he continues to serve only at the pleasure of the President. The prestige of this position is such that the current political administration cannot help but have an overwhelming influence on the Board. Nor is this meant to sound bad; an administration could not discharge its economic functions without control of monetary powers.

Between the Board of Governors and the Federal Reserve Banks, the balance of authority has been considerably shifted toward the Board during the past decade and a half. The seven members of the Board are a majority of the powerful Open Market Committee. The Board itself sets the reserve requirements of member banks (within the margins permitted by law), and it in effect controls bank discount rates. Without minimizing the advisory influence of the Reserve banks, their direct role has been a shrinking one.

What is probably more important, the Reserve banks themselves have become conscious of their public position and their acts and utterances have taken on a quality of public statesmanship which was not true of earlier years. They represent an admirable blend of public and private characteristics reminiscent of the traditional Bank of England position.

ROLAND I. ROBINSON*

* The author is professor of banking at Northwestern University.

BOOK REVIEWS

Economic Theory; General Economics

Towards a Dynamic Economics. By R. F. HARROD. (London: Macmillan & Co. 1948. Pp. ix, 169. \$2.25.)

This is an important and penetrating book. The fundamental ideas are based on Mr. Harrod's brilliant article in the March, 1939 issue of the *Economic Journal*. Here the analysis is presented more fully, and there is considerable new material dealing with the supply of saving, the foreign balance, contra-cyclical policy, and interest-rate policy.

The volume as a whole centers around the problems of a *growing* economy, in particular those associated with the process of saving and capital formation. Those who are concerned with problems (like those confronting the Council of Economic Advisers) relating to stability and balance in the nation's *economic* budget will find highly stimulating suggestions for empirical research, particularly in the area of maintainable rates of growth of the capital stock.

In the author's view, the definition of dynamic economics as that branch of theory in which every quantity must be dated (Hicks) may indeed be a genuine mark of the study of oscillation in terms of time lags. Nevertheless, for Harrod, dynamics has to do with "continuing changes generated by the special nature of a growing economy" (p. 11). Dynamics is concerned specifically with the effects of continuing changes and with rates of change (p. 8). The trend of growth may itself generate forces making for oscillation. The study of rates of growth and time lags should indeed go together, but dynamics is mainly concerned with growth and continuing rates of change.

Thus Harrod goes back to the classicals prior to Marshall. The "classical economics contains in roughly equal proportions what I define as static and dynamic elements" (p. 15). Saving is rightly treated by Ricardo as a dynamic concept. So long as there is any positive saving, the shape of society is progressively altering (p. 16). Dynamics is concerned with growth. In a dynamic system the quantity of resources devoted to production is steadily growing. Dynamics must concern itself with "the necessary relations between the rates of growth of the different elements in a growing economy" (p. 19).

Growth of the capital stock depends upon: (a) population growth, and (b) technological advances (productivity per head).¹ Growth of the capital stock, commensurate with growth in the labor force and technological ad-

¹We may usefully divide capital growth, I would suggest, into two categories: (a) widening of capital, and (b) deepening of capital (meaning more capital per worker, *not* more capital per unit of output as with Hawtrey). "Widening" of capital means in these terms simply equipping the net additions to the labor force with standard capital equipment. This requires no change in technique, only a growth of population. "Deepening" of capital means to equip each worker with more capital. This requires a change in technique, if we assume the rate of interest constant.

vances, will raise output (real income). The ratio of capital to income is the "capital coefficient." Inventions, while usually increasing the capital per worker, may leave the capital coefficient unchanged.²

The heart of the book may be found in Chapter III on "Fundamental Dynamic Theorems." The equations presented deal with the basic problem of the capital requirements of a growing society, the propensity to save, and the rates of maintainable growth. A "higher propensity to save does, in fact, warrant a higher rate of growth. Trouble arises if the rate of growth which it warrants is greater than that which the increase of population and the increase of technical capacity render permanently possible" (*Economic Journal*, March, 1939, p. 31). The *normal* rate of increase is that determined by the fundamental conditions of a steadily advancing economy enjoying given trends of population growth and technological advances.

Here we encounter the fundamental equilibrium equation, $G_w C_r = s$, in which G_w expresses the rate of "warranted" growth in an economy with a given propensity to save, C_r is the new capital required to sustain a given increment of output, and s is the fraction of income which individuals and corporations choose to save.

But now G_w may have no relation to "the rate of advances which the increase of population and technological improvements allow (p. 87). This latter, designated G_n , may be called that *natural* rate of growth of output associated with the growth of capital required by population increase and technical advances. Now the basic capital requirements ($G_n C_r$) may not correspond to the propensity to save. Quite possibly $G_n C_r \neq s$. It is the divergence of $G_w C_r$ from $G_n C_r$ which presents the problem of chronic unemployment.

Mr. Harrod considers another equation, a truistic one representing *ex post* the actual fluctuations in rates of growth in output, G ; actual fluctuations in the rates (marginally considered) of capital to output, C ; and finally the per cent of income saved, s . Thus the equation $GC = s$ is simply an identity statement reflecting *actual* changes in these variables. The problem of the trade cycle relates to the divergence of the *actual* rates of growth G , from G_w and G_n .

If G exceeds G_w , as it is likely to in a high boom, capital formation will exceed savings at full employment and inflation will result. If G falls below G_n , then capital formation will fall below the *normal* rate of growth, and so a backlog of investment opportunities will develop preparing the way for recovery.

Harrod's analysis is concerned on the one side with the problem of maintainable rates of investment, and on the other side with the problem whether autonomous investment impulses are sufficiently powerful to raise income enough to induce a full "widening" of capital. For example, in 1937-40, it

² Fellner (*Monetary Policies and Full Development* [1946], p. 80) gives capital coefficients for each of the five decades from 1884 to 1933 as follows: 2.8, 3.1, 3.2, 3.2, and 3.0. Using his data one can calculate for the same period the marginal coefficient (the ratio of the increase of capital to the increase of income from decade to decade. The marginal coefficients are: 3.9, 3.3, 3.1, and 2.6.

is quite clear that a government program to raise income to a full-employment level could have *induced* considerable capital formation, thereby bringing capital facilities (steel, for example) up to the level of the requirements of a full-employment income.

Mr. Harrod explicitly states in the foreword that Britain can look forward to a considerable period in which the interwar difficulties due to over-saving will not recur. But he nonetheless believes that "sooner or later we shall be faced once more with the problem of stagnation; and that it is to this problem that economists should devote their main attention." Moreover, he suggests that "the United States is not likely to be exempt from the problem of chronic depression," and so he deems his analysis to be of "urgent and vital relevance" here.

The main solution offered by Mr. Harrod for the long-run problem, as distinct from that of the cycle, is to drive down the rate of interest. A fall in the rate of interest would tend to raise the capital coefficient C_r , thereby helping to bring $G_s C_r$ into balance with saving. Yet he admits that even a zero rate of interest might not produce enough effect on investment (*via* the increase of capital in relation to output) and on saving to secure steady progress.

To the reviewer, a serious limitation of the proposal is the fact that any capital formation induced by a lowering of the rate of interest is a once-over push; once the capital stock has been built up to the level indicated by the low interest rate, investment outlets are again limited to the growth requirements of population increase and technical progress. Thus no *continuing* solution can be found *via* the interest rate. A low rate of interest might of course (the pros and cons of which would require another essay) be defended on other grounds.

Finally, the particular devices by which Mr. Harrod hopes to achieve his results are broadly similar to those proposed by Professor Frank Graham in *Planning and Paying for Full Employment*. For a critique of these ideas see my *Economic Policy and Full Employment*, Chapter XVIII.

What is really important in this book is not the practical policy sections, but rather the theoretical apparatus outlined for a study of dynamic economics. Mr. Harrod has given us an elegant piece of analysis, highly original, and pregnant with suggestions for theorists, econometricians and students of the business cycle.

ALVIN H. HANSEN

Harvard University

Income, Employment and Public Policy: Essays in Honor of Alvin H. Hansen.
(New York: W. W. NORTON. 1948. Pp. viii, 379. \$4.00.)

In this volume, sixteen former students or close associates of Professor Hansen have contributed essays generally germane to his work; most of them being expressive of American Keynesianism, theoretical or applied. They have been grouped into three parts, headed: "Determinants of Income" (meaning total national income), "Social Setting" and "Economic Policy." The essays in Part I generally treat the economy as a mathematically analysis-

able mechanism, though on that score, Robert L. Bishop's diagrammatic analysis of the three expansionist fiscal policies, which is placed in Part III, could as well be placed in Part I. The three essays in Part II are presumably placed there because they are broader in range or perspective than the others—in three quite different ways. In the seven essays which make up Part III, "economic policy" is dominated by fiscal policy, taxation and the national debt; the only exceptions being Alice Bourneuf's specialist's account of "Exchange Practices and the Fund" and John Dunlop's notable essay on wage-theory. Judging from the internal evidence, the essays were not written to fit into a table of contents, and the degree of unity they show is evidence of the trend of their authors' thinking, rather than of editorial planning. The anonymous editor's task of grouping and classifying them was both necessary and difficult.

The reviewer, naturally, cannot discuss adequately each of sixteen essays; nor can he discuss them as a group without doing injustice to the extent to which each is an individual product. In general and prevailing, the reader finds the economy treated as a massive and impersonal mechanism, with consumption an unvarying function of an individual's disposable income, and with a less unanimous tendency to take private investment as given, or to pay scant attention to the questions of motivation, and especially the more imponderable motivations, that underlie the behavior of private investment. There is also a tendency to slight the real problems of inflation by assuming that it is something that arises only when income exceeds the full-employment level, and that inflation and depression are simple opposites (Bishop, p. 318). This is perhaps part of a general tendency to neglect problems of the wage-price structure. The exceptions to these tendencies acquire scarcity value.

One of these is David McCord Wright's essay on the effects of income-redistribution. This stands out as a liberal document, concerned with qualitative matters and with the reactions of flesh-and-blood individuals. He stands for a balanced system, permitting some equalization of incomes, and stressing the importance of preventing severe deflation; but his emphasis is on the danger of going too far, in too doctrinaire a spirit.

"An uncritical acceptance of literal equality of income as a positive goal, and a preference for state action upon all occasions, will leave the regime of 'guided capitalism' devoid of vitality, or excuse, and ripe for extinction." This would mean economic stagnation, through the "law of deterioration of self-perpetuating groups," and the crushing of political democracy, because the dissenter will have no chance against the economic power of the monolithic employer. Compared to this, the kind of competitive forces that can still be preserved, imperfect as they are, seem to him vastly important. His program centers on the attempt to strengthen them, and in that light the main positive argument against drastically progressive taxation seems to be that it prevents the small concern from growing large by plowing back its earnings, and tends relatively to strengthen the position of the interests that have already arrived; and to prevent the group of leading concerns from growing as numerous as would be desirable.

Negatively, he combats the argument for complete equality of income which is based on diminishing utility. He emphasises the capacity of conscious wants to adjust themselves to income, and adds that the actual consumption of the rich is a relatively small matter in the national total. I believe I am representing his argument correctly in adding that in ethical terms, which are the important ones in this case, inequality of income is rather incidental to tendencies of our time which "go far beyond mere capitalism." He holds that progress, both in the larger matters and in the ethical quality of the competitive game, hinges on the influence (without coercive power) of an elite who have influence and the will to use it, but are also willing to learn. This he admits represents a delicate balance; and it seems to be implied that, when it should come to the balance involved in deciding how far progressive taxation should go, one very important consideration would be its effect on the standing and morale of this elite class.

Who are they? Wright uses the term "intelligentsia" to describe them; but they are apparently not coextensive with the "cultural elite," whose present prevailing attitude seems to be precisely what Wright deplors. They are justifiably alarmed about conditions, but alarm takes a misguided direction. "In the end, I believe, the intellectuals who destroy business competition in the name of redistribution, security and planning, because they hate Main Street, will find that they have destroyed the very diffusion of power which protected them from Main Street." In terms of what the reviewer has called "strategic decisions," Wright gives the maintenance of a strong competitive system priority over any very exacting degree of "full employment" or of equalitarianism. What this would seem to mean is to limit employment policy to what can be done by fiscal and monetary means, with faith that this can keep recessions within bounds that can and will be tolerated. And the obvious question is what would happen to this strategic decision if, in some recession, unemployment should rise, let us say, to eight or ten per cent of the working population.

Turning to Dunlop's essay, he takes as his point of departure Hansen's theory of economically sound wages, consistent with a stable price level and therefore rising, on the average, only as fast as average productivity rises in the economy at large; but with wages in particular industries following a compromise course between the average rate and the varying rates of increase of productivity in the different industries. To this, Dunlop contributes an enlightening analysis of the extent and causes of departures from a balanced wage structure, defined as similar rates of pay for services that are similar in terms of skill, experience, training and other such factors.

He finds a strong tendency to this kind of balance within the area of a bargaining unit, which is in some cases narrower than an industry and in some cases broader. Departures are due, among other things, to differences in rate of increase of productivity or of demand (the two being interrelated). These factors have more effect under piece-work, or if wage-leadership is located in rapidly advancing industries, and less effect where one bargaining unit covers more than one industry, or where strong price competition gives most of the

gain to customers, leaving little excess profit for wages to tap. Wages also tend to rise more where they constitute a small part of total cost, and where skill and similar requirements have risen. Rates of wage-change vary widely from industry to industry (the showing of bituminous coal would have changed spectacularly if the figures had been carried down to date instead of stopping at 1940). Dunlop accepts this wide dispersion as refuting the idea that rates *should* stay close to the average; and it seems at least to cast doubt on the *practicability* of attempts to stick very rigorously to previous differentials. But he indicates that the factors listed tend to set limits on dispersion.

The reviewer suspects that this is an example of a type of development that is needed to give relevance and realism to our whole traditional theoretical structure, from marginal utility or indifference curves down, substituting a zone of indeterminateness for a sharp line, and complementing this with active investigation of the forces that set limits on the width of the zone, and those that create variations within it. Taussig's "penumbra of supply and demand" was an early instance of the zone concept, but the second kind of study seems needed to complete it.

Another essay, not quite in the line of prevalent Keynesian emphasis, is E. C. Brown's examination of ways of taking the negative effect on investment incentives out of heavy business taxation. The analysis is technical, and the devices suggested may be too involved to be readily convincing, but the importance of the subject urges serious consideration of such proposals. It is refreshing to see this much attention given to the impact of fiscal policy on incentives to investment.

E. D. Domar also is concerned about private investment. He classifies it into spontaneous and induced, admitting some violence to logic, and not reckoning with the fact that actual investment is jointly affected by both kinds of causes. He is concerned about monopolistic obstructions, and gives a very lively and convincing account of the way desirable investment may be vetoed by existing interests in a hypothetical planning conference (p. 52). In so far as the loss from scrapping old investment is a deterrent to making new ones, he indicates that this deterrent varies with the percentage of the market the concern holds (p. 36), later concluding that "it is not monopoly in the narrow technical sense that matters, but rather bigness in general" (pp. 51-52). He has demoted to a footnote Kuznets' contention that large expected demand is a factor making replacements more economical, and indicating or at least implying that bigness has favorable as well as unfavorable effects.

As to induced investment, he holds it cannot happen so long as unused capacity exists (p. 46). This seems to leave out of account the theory and practice of stand-by capacity, which is the most economical way of handling short peaks, but is substandard for anything like continuous use, and may be replaced if demand improves to an extent creating an expectation that this stand-by capacity may be utilized, for example, 70 per cent of the time instead of 20 per cent. In such a case, "excess capacity" is a relative term; and the kind that is nearly always present does not veto induced replace-

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ments. Later (pp. 46-47) Domar takes the extraordinary position that investment, increasing in response to increased income, does not count as "induced investment" until it exceeds the amount necessary to absorb voluntary savings, or to maintain "full employment." He seems to regard induced investment as desirable; yet investment beyond that point is inflationary, by definition. He estimates the critical rate of investment as increasing productive capacity 4 per cent per year; hence it requires 4 per cent increase of (real) income per year to bring it about. This is based on an estimate that marginal savings are 12-15 per cent of income (Duesenberry's formula gives not quite 10.23 per cent for the long-term trend); and that a dollar of added investment increases annual output-capacity by 25 to 33 cents. This gives a range of 3 to 5 per cent, or 2.56 to 3.41 per cent on Duesenberry's basis. If Duesenberry's figures are correct, Domar's 4 per cent would be mildly inflationary. He has rendered a service by undertaking a quantitative first approximation to the rate at which our Red Queen economy has to expand, to stay in the same place in terms of employment; but his 4 per cent is clearly a very rough estimate, and probably high.

James S. Duesenberry undertakes to bring under one formula the short-run and long-run savings functions, the rationale of his formula centering in the idea that the highest consumption previously attained tends to become imbedded in the standard of living, so that if income shrinks, consumption shrinks less than in proportion, and restores itself when income recovers, while the long-run trend is a constant proportion of income. His formula is:

$$\frac{S_t}{Y_t} = .165 \frac{Y_t}{Y_0} - .066 \text{ where } Y_t \text{ and } S_t \text{ are income and savings of any}$$

given year, and Y_0 equals the highest income of any previous year. This formula gives a higher marginal rate of savings for cyclical fluctuations than for secular trends, but has some tricky properties. With a steady increase of income at 2 per cent per year, a constant 10.23 per cent of income would be saved; and the secular trend through a series of cycles would be about the same. In a depression, the percentage of saving shrinks, reaching zero when income is 40 per cent of the previous high. At 20 per cent of the previous high, savings, having become a minus quantity, go no lower, and rise to zero as income goes to zero. The author notes that these peculiarities appear only outside the extreme range of probable fluctuation; but they cause the sensitive marginal rate of saving to change, even within the normal margin of fluctuations, starting at 26 per cent and diminishing as income shrinks below its previous high.

Duesenberry thinks in terms of a major cycle having an approximate ten-year term; and the percentage of income saved at the peak of such a cycle can vary between the extreme limits of 10 per cent and $13\frac{1}{2}$ per cent, according as income for the peak year exceeds that of the preceding year by a negligible amount, or by substantially the whole of the ten years' trend increase (which I am reckoning at 22 per cent). As a result, during a depression following a very sharp peak, the savings shown by the formula would be a little smaller, and consumption a little larger, than the rationale would call for. The formula, in effect, represents consumers as struggling to protect,

and to return to, a rate of consumption of 90 per cent of previous income, though their highest previous actual consumption (that of the peak year) may not have risen above 87 or 88 per cent. The formula registers the effect the previous peak income would have had on consumption if it had been sustained, when it may not have been sustained enough to have that effect. These peculiarities may not constitute major defects; but it is not clear that this formula is superior to the simpler procedure of reckoning marginal saving equal to average in the long-term trend, and perhaps twice as great, or more, in cyclical fluctuations. Goodwin's essay (mentioned below) contains a way of separating cyclical and trend marginals (p. 125).

L. A. Metzler traces three lags in the circular flow of income, which have been incorporated in simplified cyclical models and which appear to him to be the principal lags, or the principal ones accessible to measurement by present unrefined techniques. There is the lag of consumers' expenditures behind income payments (associated with D. H. Robertson), the lag of output behind change in volume of sales (associated with Eric Lundberg) and the lag of income payments behind changes in output. His principal conclusion is that the first lag is short, relative to the second.

Some other time-relations may be important, including those complicated by increase or decrease of inventories or fixed investment, which may disguise the lead-lag relationships. Timing of movements of costs and prices might also, it would seem, be significant.

So far, we have been considering essays that depart from typical neo-Keynesianism, either in basic perspective, or in introducing dynamic factors into the formulas (Keynes dealt with them outside) and undertaking to measure them. More in the orthodox line is Samuelson's essay on the mathematics of income determination. It exhibits what happens to the Keynesian theory when it is simplified by isolating the central mathematical formula and its corollaries from the context of factors that do not lend themselves to this treatment, and which Keynes handled in "literary" fashion. Samuelson starts by taking investment outright as a constant, with the result that the combined consumption-plus-investment function (in the now-familiar graphic exposition) intersects the income-line from above, creating a stable equilibrium. He then introduces an autonomous upward shift in the consumption function, by simply adding a factor a to the function as it stands. This serves to show that such an increase has a multiplier effect, just as much as increased investment does, but one wonders whether this simple mathematical device is adequate to all the possibilities of the problem.

More serious are the questions raised when "induced investment" is taken into account by making investment a rising function of income. Samuelson is still confident that this gives an intersection from above, giving a stable equilibrium. This must be conscious simplification, since his own earlier article on the synthesis of the acceleration principle and the multiplier includes explosive and oscillatory solutions. In the former, the intersection must be consistently from below; in the latter, intermittently so. To the reviewer, it seems that the relation of investment to incomes varies with time and past

changes of income, and therefore breaks down the whole static-equilibrium formula; which thus comes to constitute the chief error in the current simplified exposition of Keynesian theory.

In so far as investment responds to current income, its short-cycle response is, one would naturally assume, much more sensitive than its long-term trend response. But other factors enter in. The initial effect of a substantial increase in income, in a system which has either little unused capacity or many aging units, would be to increase investment demand so markedly that combined consumption-plus-investment would almost certainly intersect the income-line from below, destroying stable equilibrium and creating a cumulative upward movement. Is not this what regularly happens in the upswing of a cycle and in reverse direction on the downswing? The cumulative expansion cannot last indefinitely, for a number of reasons, not all of which seem amenable to treatment in this formula. For one thing, while money income might increase without limit, physical product is more restricted; and investment demand depends on physical product.

The upshot seems to be that investment cannot be treated as a simple rising function of current income alone, without doing violence to the essential facts; and that a more realistic (and dynamic) treatment inevitably introduces instability. Even without allowing for this, equilibrium comes to depend on the intersection of two lines which are so nearly parallel that the determinateness of the outcome becomes dubious (current graphic representations sometimes grossly exaggerate the angle of intersection). Samuelson saves himself by a concluding sentence, emphasizing "the violence done to complex reality by the simplified statistical abstractions of this paper." But is such a vague and general last-moment *caveat* sufficient?

He goes on to deal with more detailed problems, including the three methods of fiscal expansion, demonstrating that a dollar of increased public spending on a balanced budget increases income by exactly one dollar, and that this also applies to an increase of business investment, financed by an increase in business saving. He deals with the balance of corporate investment and saving, and with the balance of international payments; all in mathematical terms simple enough to be accessible to the non-specialist.

While Samuelson is oversimplifying his previous analyses, Richard M. Goodwin is developing them further, dealing with these matters of time-sequence, in highly mathematical fashion. He develops a "flexible form of accelerator," under which an increase in income gives rise to an increased equilibrium level for total capital, which capital would approach asymptotically (if income remained constant at its new level) with a diminishing rate of annual investment, always a constant fraction of the remaining difference between current total capital and its equilibrium level (p. 123). But this behavior of investment reacts on income, and this mutual reaction can produce an oscillatory model. Goodwin introduces constants which give nine-year cycles, each of half the amplitude of the preceding one, leaving outside disturbances to renew the oscillatory movement and keep it from dwindling to zero. As already noted, he derives independent marginal rates of consump-

tion for cyclical movements and long trends. He displays impressive resourcefulness in the mathematical handling of these dynamic relations; and leaves this reviewer behind before he gets to the point of grappling with irregular shifts in the "marginal efficiency of capital." If Goodwin's model is, as he recognizes, too mechanical to give results that conform fully to observation, the same must be true in much greater degree of Samuelson's and of simple graphic models like Bishop's diagrams of the three expansionary fiscal policies.

A. P. Lerner's essay on the burden of the national debt develops and defends the theme of "functional finance," explaining briefly the automatic check on inflation under this policy. Here he assumes that there is some level of total spending "high enough to prevent depression yet low enough to prevent inflation." He assumes that the tendency of a growing public debt to increase inequality of incomes can be offset by making added taxation more progressive; while the deterrent effects of heavy taxes on investment can be completely cancelled by full permission to offset losses against profits. Many must envy him his confidence on all these points. But a couple of pages later, he seems to have forgotten about unequal distribution, and is talking about a large debt making people in general so rich that "very little work will be done over and above that which is done for the pleasure of doing it"; at least when we get to the point where interest on the national debt is "many times as large as the income from other sources." We are warned, or promised, that we may be closer than we think to attaining this strange millennium. "In a rich country like the United States, if everybody had such an accumulation of government bonds that conspicuous consumption and display lost their significance, needs of material goods could be so simplified and reduced as to make their complete satisfaction feasible by the few hours' work that are necessary for health or may become necessary for social approbation." This combines the rather original fallacy that (unequally distributed) government bonds will make everybody so equally rich as to wipe out invidious consumption, with the older delusion that it is only this invidious element that prevents us from satiating our wants with a fraction of our present average consumption.

If this happens without heavy taxation, "nearly all goods will be free," only the taxation will be necessary to prevent inflation (by which these free goods would rise to exorbitant prices), only the taxation would be a worse evil than the inflation. And functional finance will prevent us from reaching this point, thus leaving the reader in additional doubt as to how seriously the discussion is meant to be taken. The reviewer cannot avoid the unworthy suspicion that Lerner has been using these imaginative flights to get the reader in a frame of mind in which the author's more serious views will look sound and sensible by comparison. If so, the effect on the present reviewer was the reverse.

Finally, Lerner argues that increased private debt is on all fours with increased public debt in the effects just discussed, sidestepping the fact that private investment creates salable goods directly and is financed out of the

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prices charged, these prices taking the place of the taxation which Lerner argues would still be necessary to prevent inflation. Lerner's contention that "public investments may be just as useful in increasing future output" does not seem to meet the case. If they were useful *in the identical way*, they would not have the peculiar effects which Lerner had previously discussed. Once more, the reviewer confesses inability to take this argument seriously as an element in the pros and cons of functional finance.

In closing, Benjamin Higgins' discussion of secular stagnation may be mentioned. He gives a non-mathematical treatment, but rather handicaps it at the outset by a hypothetical diagram in which he compares the trend of gross national product at full employment and its actual trend, over a period of three Kondratieff or 17 Juglar cycles. The full-employment trend is a growth-curve, the "actual" trend is a less steep growth curve, starting above the former and ending below it, the intersection marking the beginning of "stagnation." This seems to be a basic error, because the actual trend strikes an average between cyclical troughs and peaks, and therefore is bound to fall below full employment, on account of cycles alone, even if there is no stagnation. So it seems that secular stagnation, if it comes, cannot be represented by any such simple device as the intersection of these two lines. By this device, the only condition that would *not* register as secular stagnation would be long-continued over-employment due to war or some other emergency.

In order to show an hypothetical period in which stagnation has not set in, Higgins starts his trend-line for actual employment fully 50 per cent above full employment! And the highest Juglar peak included in his first Kondratieff cycle is about 90 per cent above the full-employment trend! This appears to be a *reductio ad absurdum* of this diagrammatic notation, which is adapted to proving that any condition that could ever occur is one of secular stagnation.

At this point the reviewer wakes to the realization that he has given some individual mention to all but four of the sixteen essays. Feeling that the review must close, he presents his apologies to Messrs. Alexander, Musgrave, Perloff and Stettner. Despite a disquieting number of errors, it seems to the reviewer that Professor Hansen may well be gratified by the number and varied ability of the essays which are joined in this tribute. As a perspective of the present state of Neo-Keynesian economics, the volume shows a few useful deviations from what can fairly be called the orthodox Neo-Keynesian orientation and emphasis, and a larger number of useful dynamic developments and quantifications. The accompanying drawback is a tendency to be content with what can be done by mathematical formulas or diagrams, sometimes vastly oversimplified. Along with this goes a large amount of Keynesian discipleship that is more orthodox than the master. This was inevitable; and the tradition may outgrow it in time, if the constructive trends continue, of which this volume affords promising examples.

J. M. CLARK

Westport, Conn.

Democracy and Progress. By DAVID McCORD WRIGHT. (New York: Macmillan. 1948. Pp. xvii, 220. \$3.50.)

Professor Wright has written the best defense of private enterprise we have seen. It is not a plea for *laissez faire* and the good old days—far from it—nor for the retention of capitalism “as is” without reconditioning. It is an argument, brilliant in many respects, for a flexible capitalism capable of adjustment to changing conditions.

Defense of private enterprise or any other system must be based on value-judgments. After ten years of reasonably “pure” economic analysis, Wright has concluded that “the man who wishes to avoid nonsense cannot study social policy on a technical level alone.” He has discovered that economic processes involve more than the price system, and that economic analysis cannot cope with the basic problems of economic life without attention to the sentiments which motivate it, as well as to the rational instrumental judgments which shape its policies.

He is fortunate in having made this discovery in so short a time—possibly as a result of his earlier training as a student of architecture. Many older economists have never made it, and many younger ones will not, so long as the present prestige of “objectivity” and mathematical analysis,¹ and our present narrow training of economists, persist.

Wright’s central thesis is the familiar one that all our liberties, including political democracy itself, depend on the preservation of the profit system, although he nowhere expresses the idea as baldly and naïvely as does most business propaganda. The competitive system, he says, is not in itself a guarantee of democracy and progress, but it is an overwhelmingly necessary condition for them. Capitalism is the only system we dare trust, and we would better not risk throwing the baby out with the bath by going in for comprehensive planning, swallowing Keynesianism whole, or uncritically accepting a New Dealish evaluation of security and equality.

Private enterprise, the argument runs, is the system demonstratedly the most favorable to scientific research and technological innovation, and therefore to material progress (bigger and better gadgets?); to alternative job opportunities for the worker—a condition given great emphasis as essential to economic and therefore to political liberty, and one which involves not only avoidance of government planning boards but also reform in trade union policies; and thence to “democratic opportunity” through the beneficent action of rivalry and competition (suitably divested of their more unlovely aspects). It is futile to suppose that planning and free enterprise are compatible, for comprehensive planning through authoritative government boards would reduce private business to an empty shell. It would put us under the thumb of a self-perpetuating bureaucracy, which, by its inevitable antipathy to technological change and innovation (since they would upset production and market forecasts and budgets) and its discouragement of risky investment, would result in a stagnant economy. Put in these general terms, the

¹ This is not to imply that these do not have their place. It is merely agreement with the author that by themselves they are not enough.

argument is familiar enough, and we might conclude that Wright only reiterates the stereotyped "line" of capitalist propaganda. Such inference would be mistaken, however, for his thinking is penetrating and independent, though his emphasis on invention and risky new ventures indicates the influence of Schumpeter. The book may well give pause to any but the most uncritical advocate of the Administrative State as well as to the equally uncritical disciples of Hayek and the invisible hand.

The last two-thirds of the book is devoted to a critical but somewhat sketchy consideration of well-recognized economic issues—instability, competition and monopoly, distribution of income, saving and investment, isolationism and tariff barriers, and the policies of organized labor. All through the analysis runs the case against comprehensive planning. On the other hand, the "friends" of private enterprise who oppose government regulation on principle are pointedly regarded as among its worst enemies. Wright shares the opinion of the more intelligent business leaders that the profit system must be made to work better than it has in the past, if it is to survive. It needs various readjustments. In refusing to scrap it for a streamlined experiment, Wright is aware that it is up to its defenders to show what can be done to make its performance reasonably acceptable, but he wisely refrains from offering a formal blueprint.

He contrasts two types of policy: the conservative, with its tolerance of private monopoly, its indiscriminate emphasis on government economy, and its high-tariff isolationism; the other, the "ultraliberal," a policy of "guided capitalism," which for brevity we may associate with the New Deal and the policies of the British Labor Party. He will not stand on either platform, but he takes some planks from the ultraliberals, while some of his ideas, particularly his opposition to progressive taxation, carry the odor of reaction.

The two main defects of capitalism are monopoly and instability. The aim of anti-trust policy should be the preservation of technological creativeness and economic democracy, the latter meaning fair competition and a chance for the little fellow. To this end, he advocates monetary policies to keep fluctuations within bounds, credit facilities for enough small business and independent firms to keep big business from becoming either stagnant or oppressive, restriction of mergers by purchase, and finally, revision of the patent laws. There is little in all this to question seriously, especially if one belongs to the school of sentiment which feels that small businessmen are *ipso facto* better citizens than captains of industry. Apparently, Wright is not impressed by the possible hazard to democracy from the pressure-group methods of these same little men organized.

The gist of his discussion of business cycles is that a planned economy could not remove industrial fluctuations unless it were willing to hold back new inventions and refuse to satisfy consumer wants promptly. In any economy in which growth and change are not checkmated, he holds, a certain amount of instability is inevitable. "An industrial society without a stabilization problem is likely to be an industrial society without economic freedom." So long as there are new inventions, new commodities, and resultant changes in consumer demand, the forecasting essential to a planned economy would

meet with insuperable difficulties. Stabilization would be bought at too high a price if it required us to curb our desire for the new look and the latest gadgets as soon as they appear on the advertising pages.² In a word, comprehensive planning would either have to restrain runaway demand, inferably by rationing and priorities—which most people do not like and which Wright therefore rejects—or it would have to retain many of the wastes and stabilize only by techniques already available.

He holds, however, that if we want a tolerable level of security, we cannot let inflation and deflation go their devastating way. His pragmatic solution is a "filling in" policy, a combination of timely pump-priming and continuous government expenditure for certain needed social services. If this sounds like an extract from the New Deal, no matter. It is practical Keynesianism, for the multiplier is just below the surface. "Suppose we undertook to rebuild the slums of every city. Would that not make a tremendous demand for durables and inject large amounts of purchasing power?" If this increased the government debt, so what! The significance of the debt is not its absolute size but its size relative to the national income. This may sound naïve, but we are spared the cliché that the debt is not really a debt, since we owe it to ourselves.

He has no use for egalitarian philosophy, and no fear of great fortunes, because it is "only three generations from shirtsleeves to shirtsleeves." Considering the dominance of the corporate form of business organization and the prevalence of family trusts, reiteration of this shopworn myth must be attributed to wishful thinking. Rather than try to increase consumer demand by redistributing income, he holds, we should encourage saving, investment, and production; but in Chapter 10 his brilliant argument for free international trade is based on the expectation of surplus savings in this country. As an outlet for them we shall have to have investment abroad. Does, then, capitalism require some kind of economic imperialism? Whatever the answer to that question, Wright does not look far enough ahead to consider what outlet for redundant savings we shall have when the backward countries are industrialized.

It would be difficult to arrange Wright's specific recommendations into a neat pattern. The book surveys too much territory, comes too hot off the bat, and is far too short to deal adequately with the implementation of his reforms or to integrate them into a consistent and logical whole. It has both the merit and defects of pragmatism in general. Dealing in compromises between values which if taken as absolutes may be incompatible, and concerned with differences of degree more than those of kind, his views seem at times disconcertingly ambivalent. This puts the critical reader on the spot, since he cannot be sure that he is interpreting the author fairly and accurately. Indeed, accuracy is an anomalous concept in connection with pragmatic compromise.

Wright holds, for example, that literal equality (which, so far as we know,

² But see his incidental reference to "false obsolescence," produced by excessive advertising, p. 122.

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outside of Russia, nobody since Babeuf has advocated) would be impossible without abolition of the family. Hence, all we can do is to provide a "fair" rather than an equal start in the competitive struggle which is life. But can anyone define a "fair start" any better than a "fair wage"? Wright touches on race, but not sex, discrimination. He does not consider regional differences in resources, or the historical process which have made some cultures rich, others poor, in opportunities. What would he do with our own poor South, unable to finance a fair start for all its too numerous children? Federal aid for their education must be paid for by the productive workers of more prosperous regions. He would doubtless vote for this, since he says that "an adequate approach to equality [equity?] of opportunity undoubtedly requires great government outlay" for health, housing, and education; but to do so he would have to forget, *ad hoc*, his aversion to use of the tax power to lessen extremes between incomes. There is some point in his argument that progressive taxes, unless small new firms are granted sizeable exemptions, hamper the rise of the new man and the new enterprise; but what is the difference between taxing individuals according to their ability to pay, and taxing well-to-do parts of the country, like New York and Virginia, to provide better health and education in the Deep South?

Logical difficulties of this kind, giving rise to inevitable ambivalences, are characteristic of any pragmatism. The pragmatic approach, indigenous in Anglo-American gradualism, is the only method of progress we dare trust. A pragmatic culture has the faculty of gradually correcting inconsistencies, not merely through "drift" but through conscious modifications in the adjustments between its fundamental valuations.

Various contexts indicate that by "comprehensive planning" Wright means some form of collectivism.³ He takes insufficient care, however, to distinguish between comprehensive planning and the piecemeal planning necessary for the implementation of reform measures. If his thought appears on occasion a bit vacillating, it therein exhibits a characteristic of all instrumental pragmatism attempting to deal with an extremely complex situation. In steering between Scylla and Charybdis, it at times has to cut pretty thin. Wright himself notes that "the line between stabilizing the economy and setting up an over-all direction of it is extremely tenuous" and that "the two policies are easy to confuse." He might well have added that our ultraconservatives do their best to produce this confusion by branding every proposal for government aid or regulation a step toward the police state.

Specific recommendations for piecemeal reform are often less significant than the social philosophy—the system of value-sentiments—which lies back of them. Almost any liberal economist could draw up a list of remedial measures, which would differ from Wright's mainly in emphasis and detail. Likewise, almost any critic could find numerous points at which to disagree, both as to specific ends in view and as to the practicability of their imple-

³ "We will call comprehensive planning . . . the type of system . . . in which the general over-all pattern of development is planned and licensed in advance by a unified group of 'experts'—whether businessmen, bureau chiefs, or commissars" (pp. 3, 4).

mentation. Such criticism would be of secondary import. The main significance of the book lies elsewhere—in the first five chapters, in which the author posits the fundamental values he thinks an economic system should serve, and which, he believes, can be effectively served only by the profit system.

The economist who gets off the range of mechanical price analysis must realize that he is entering the still inadequately explored field of the psychology of motivation (needs, wants) and values,⁴ with which exchange and exchange value have only indirect connection and sometimes none at all. Attempts to fuse economics and ethics,⁵ to be even measurably successful, must be based on a general theory of human needs and their corresponding values. Judgment as to the effectiveness of a social system is essentially job analysis, in which the first and absolutely essential step is to identify, or to posit, the end or ends to be served by the system. Both economics and ethics in the last analysis are concerned with ends and means, with human beings and their resources. The resources are instrumental values. By themselves they have no significance or importance. The ends are intrinsic values, internal to the individual human being as states of feeling—at the level of consciousness, pleasurable experiences (satisfaction), or in a given situation the least unpleasant experience available. Instrumental values may stand in unmediated relation to intrinsic values—for example, the objective condition of freedom in relation to the subjective sense of freedom—or they may be far removed as stepping-stones, way-stations (John Dewey's "ends-in-being") in a long, complex chain of instrumental processes.⁶

Intrinsic values result from, or rather are, the satisfaction of needs, or wants, which constitute the "drives" to human behavior. No organism is ever more than momentarily in equilibrium, since it is subject to continually recurring needs or lacks. Its behavior is a constant attempt to maintain or restore equilibrium—organic balance on the physiological level, peace of mind on the psychological plane.⁷

* It may be asked why "utility" would not be a more appropriate term. The answer is that utility, as thought of in economics (if the term is used at all), is always something external to the individual, as instrument to his "satisfaction." The satisfaction has importance or "value" in itself, without other *raison d'être*. Not so the instrument. In any case, the extensive philosophical literature on "general value" has avoided the term utility, and popular usage of late has followed suit.

⁵ By way either of an economic interpretation of ethics or an ethical (welfare) criterion of economy.

⁶ The best analysis of the nature of intrinsic and instrumental values with which the present writer is acquainted is given in the closing chapters of C. I. Lewis's *Analysis of Knowledge and Valuation* (La Salle, Ill., 1946).

⁷ A "want" or a need in this connection is a state of organic or psychic disequilibrium or restlessness. It does not necessarily produce a desire. In the terminology of present-day psychology, want and need are synonymous, and the psychologist avoids the economist's indeterminate distinction between needs, comforts, and luxuries. Organic or psychic equilibrium is the key postulate of C. Reinold Noyes' recently published painstaking and laborious analysis of the mechanism of human behavior. (See his discussion of "homeostasis"—his term for equilibrium—in his *Economic Man in Relation to His Natural Environment* [New York, Columbia University Press, 1948], Vol. I, pp. 29 ff.). A similar approach is followed by H. A. Murray, *Explorations in Personality* (Harvard

Scratch a "scientific" economist, and under the epidermis of his objectivity and rigid logic you will find a layer of welfare sentiment; that is, you will find a *man*, however loath *qua* scientist he may be to admit it. Every man is a welfare economist in a broad sense, though the welfare which concerns him may be only his own or that of the people with whom he prefers to associate because they "feel" (have the same sentiments) as he does. Wright, of course, is a welfare economist, in the more usual and reputable sense.

Welfare, however, is a slippery concept, and may be a weasel word. To mean anything as the aim of social policy, it must be given content, which in the final analysis must be the intrinsic values, the satisfaction of needs, the sense of well-being which comes with the recurrent restoration of organic or psychic equilibrium. The sixty-four dollar question is to what extent, if any, the basic needs can be identified by scientific research and empirical knowledge, or, on the other hand, how far needs—especially the "higher" moral, cultural, and esthetic needs which social policy should serve—can be posited only on grounds of sentiment and taste. The significance of this question is obvious: to the extent that needs can be empirically verified, something like a science of welfare is possible, but to the extent that they are posited by sentiment, welfare is a matter of subjective social philosophy. In the latter case there will be as many (frequently conflicting) "welfares" as there are cultures, for a social philosophy is an ideology, or system of valuations, and the relation between culture and ideology is a reversible reaction—a mutual cause-and-effect relation.

Inability to identify needs by any criterion other than subjective sentiments has been the rock on which welfare economics has repeatedly come near foundering. How can there be universal agreement on the content of welfare, in view of individual differences and conflicting cultures? It is a temptation to conclude that evaluation of the various intrinsic needs and values must necessarily be made by feeling or sentiment.⁸

Wright apparently shares this view, in his evaluation of science and the scientific method. In an early chapter he puts science on a pedestal because discovery and invention are the bases of the higher material plane of living which is "the one goal common to all factions in America today," but he later knocks science off the pedestal, because "scientific method, from its very nature, has almost nothing to say on the really important problems of life." This idea, common enough, that science can have nothing to say about end-values is reflected in the current best-seller anti-intellectualism which finds religion the only way out of the mess we are in; but it is untenable, at least so far as the basic survival and health (physical and mental) needs are concerned, as Wesley Mitchell pointed out twenty-five years ago.⁹

Psychological Clinic, 1938, reissued 1947). Murray subsumes the process of needs-satisfaction under the Second Law of Thermodynamics.

⁸ The present writer was inclined to this view some years ago in an article reviewing J. A. Hobson's *Economics and Ethics*. See "On the Content of Welfare," *American Economic Review*, June, 1931.

⁹ "The Prospects of Economics," in *The Trend of Economics* (1924).

Survival and health are prerequisite to the higher values—though Max Handman once remarked to the writer that there would be no lyric poetry if there were no neurotics!

Be this as it may, physiology, neurology, and the other organic sciences are supplying us with growing and increasingly accurate knowledge of the physical needs and biological drives; and psychology and psychiatry, while young sciences, give us even now sufficient empirical understanding of motives and attitudes to distinguish between those compatible with normal personality and social peace and those that are not. On the other hand, while science may reveal to us the influence of these primary drives on our simpler value sentiments, it is difficult to see how it can be a capable and accepted guide to the higher complex cultural values. Given time, perhaps it can; but just now, time is of the essence. Under threat of nuclear fission to survival itself and to the values which give survival meaning, not only an unusually large percentage of the public but some of the scientists themselves (though apparently not the psychologists) are turning to religion. Such escape is always sought in periods of *Sturm und Drang*. Possibly some hope for positive construction lies in this direction, but we could have more faith in it as a world unifier of sentiment if someone would show us how it is any easier to get a community of sentiment between the religion (or the ethics) of Marx and that of Christ or Mohammed than to reach a common standard of human welfare through science. Despite the present impasse,¹⁰ we are perhaps in the long run more likely to make progress toward a firmly grounded human welfare if we see, with Anthony Power, that "the greater the knowledge of science [given freedom of research], the greater the chance of scientific thought presenting an irrefutable and universal logic governing every field of activity and leading to the establishment of a sane world order,"¹¹ than we are if we rely too confidently either on supernatural guidance or on the intuitional insight of *Geisteswissenschaft*. At least, Wright might consider revising his idea that science can have nothing to say about the values constituent of human welfare. If economists in general would permit themselves more access to the empirical knowledge available on the psychology of motivation, they might be less confused and less dogmatic about the alleged absence of any relation between economics and ethics; but that would require them to tear down at least one watertight bulkhead in their mental hold.

It is not Wright's purpose in this book, however, to speculate on the possibility of a universal ethics or on science *versus* sentiment as basis for definition of welfare. Only incidentally does he touch on the problem of international peace, although peace, as essential to durable security, is certainly a fundamental value. He is concerned, rather, in analyzing the internal dangers which he believes threaten the cherished values of the American way of life—liberty, democracy, and (with far less emphasis) security. Scientific psychology undoubtedly regards some measure of freedom and security as universal human need; democracy is a complex of values, some intrinsic, some

¹⁰ Scientific agreement is, of course, impossible so long as Russian biologists and psychologists must conform religiously to the Marxian dialectic.

¹¹ Review of Aldous Huxley's *Ape and Essence* in *The Nation*, August 21, 1948.

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instrumental, less amenable to scientific evaluation. But we do not go to psychology to support these values; whatever their organic roots, they are feelings or sentiments deeply ingrained in us by history and culture—so deeply that we mean to defend them, come hell or high water. Wright would probably say that we should do everything in our power to secure peace, but that in loyalty to our own basic values we should hew to the line and let the international chips fall where they may. It would be difficult to disagree with such a view, though we may not agree with him as to the values ancillary to liberty and democracy or as to the specific policies he recommends.

Even within our own American culture, however, Wright is on the horns of a dilemma—our value conflicts. To mitigate these conflicts and set us more firmly on the road of qualitative democratic progress, like everyone else he appeals to leadership and education to discover values and disseminate awareness of them. There is, of course, nothing else to appeal to, consistently with a democratic ethic. The present writer, at least, has no quarrel with Wright's strictures on the over-specialization and over-intellectualism of our present higher education; nor can anyone question that there must be leadership in the formation and perpetuation of moral (= welfare) sentiment, or that such leadership must come from an elite of some sort.

His treatment of leadership is necessarily somewhat sketchy, but has the merit—lacking in some students of the subject—of emphasizing the fact that leadership functions through persuasion and is, therefore, not to be confused with the power of office. But leadership is unequal to the task he demands of it, the development of "better qualitative standards of democracy." He relies for such leadership on an intelligentsia composed broadly of the "religious, professional, and intellectual groups." It is a bit difficult to imagine how we can expect from groups so heterogeneous in interest and social (not to mention economic) philosophy homogeneity of value-sentiment or agreement on social policy, though the threat of the atomic bomb may prove a powerful influence in diminishing the amount of energy which leaders, moral and political, habitually spend in combating one another. We shall do well, perhaps, not to expect too much too soon from either education or leadership, so far as agreement on the content of welfare (especially *whose* welfare) is concerned. Fortunately, the house of life is not built on a one-story plan. It is a far cry from the primary drives to the complex interests of the civilized man. Within a democratic and liberal culture, it is not only permissible and desirable, but inevitable, that the "higher" hedonic needs and interests should vary from person to person, group to group, and region to region. Without such variation, democratic culture might degenerate into the stale, dead-level of mediocrity, to the suppression of certain well-recognized personality needs, for example the need for status, recognition, distinction; and for variety of new experience.¹² Herein lies a deep significance of personal liberty—involving the right to be different as well as the right to "belong." Herein,

¹² Bearing on this line of thought is Wright's defense of rivalry and the competitive selection of ability. One may harbor some doubt, however, about go-getter ambition as a builder of "democratic character."

too, we may find the value of tolerance and forbearance, a certain pragmatism in moral sentiment and instrumental judgment, even as to the amount of economic planning compatible with democracy and liberty.

Some comment should be made on Wright's conception of progress. While capitalism, through the freedom it accords to science and invention, is the system most favorable to material progress, progress as "social betterment" involves moral and esthetic values. The aim of progress in general is not a fixed static ideal; it is "continual development" or "an ideal process of variation." The implication is that it is development towards "personal freedom and democracy of aspiration." Aspiration for what? Early in the book, it appears that most people are interested primarily in the material standard of living, and in the discussion of economic instability the profit system is praised because it gives the consumer what he wants when he wants it; but in Chapter 3, "The Meaning and the Method of Democratic Progress," in a passage remindful of Carver's "workbench" philosophy, we are asked to limit our wants. Our goal should not be the ending of competitive acquisition, but "the competitive acquisition of nobler things in a nobler way." "Not satisfactions but better wants" is the aim of social progress. Paramount among these better wants or drives is the "inventive-creative" urge. "The aim of creation is the creation of a creative world." This is sheer nonsense—or would be, did not Wright define a creative world as one "in which the loftiest and most satisfying¹³ creative impulses of the human being can be expressed." Here we escape hypostatization of a process into an end only by plunging into unadulterated subjective relativism. For who is to say what the "loftiest" or "noblest" desires are? Apparently Wright, the artist, for one, since on page 197 we are told that "the philosophy of life which the writer believes to be most fundamentally democratic, and the one hitherto most congenial to the modern man, is the philosophy of the artist—the searcher."

On what empirical evidence he assumes (p. 24) that "the inventive-creative urge and the ideal of continued development are more likely to appeal to the democratic mind" is not stated. Our impression is that most people are far less interested in "creation" as a process than in its results. Even among the elite, the scientist hastens to nail down the credit for a discovery he has made, the inventor loses no time in getting a patent, and the artist—however much he declaims on "self-expression"—sooner or later holds an exhibition.

Wright knows that "schools" of art and "academies" of intellectuals tend to discourage originality, and he is convinced that planning boards would similarly obstruct technological innovation. It does not follow, however, that all innovation, either technological or esthetic, is necessarily progress toward "better wants." It is not yet clear, for example, that television will prove either a moral or an esthetic advance—and there are some uncultivated dolts who prefer Rembrandt to Picasso. Wright's high valuation of technological progress is a reflection of the psychology of our current machine culture. One suspects that he has unconsciously erected his own personal artistic drive into a universal need, and therefore calls it democratic. One wishes that he

¹³ Although he has just said that satisfaction is not the goal of progress.

would offer some suggestion for enabling the millions of routine factory workers to satisfy this urge, if it is as essential to their welfare as he apparently thinks.

There is no similarity between Wright and the ass between two haystacks who starved because he could not decide which one to eat from. Wright knows what he wants—freedom for the creative urge—and his hunger for that sends him at once to the capitalistic stack, though he knows that there are nettles in its hay. The creative urge is, in fact, the pivot on which his whole defense of private enterprise turns. His argument that comprehensive planning would stymie that urge is arresting, but it is inconclusive. There is insufficient evidence; the case is not proved. Yet there is logic enough in his fears to make us cautious (to say the least) of the innovation of a planned economy, even though we may theorize that when we become civilized enough and are more equal to the exceedingly complex job of managing our own public welfare, the present system of delegating that management on a commission (profit) basis, like the old tax-farming system, may be superseded without loss of any eternal values.

A. B. WOLFE

Ohio State University

Dynamique Économique. By RAYMOND FLORIN. (Soissons: Imprimerie Saint-Antoine. 1948. Pp. vi, 115. 500 fr.)

M. Florin's essay in economic theory deals with the response of entrepreneurs to changing conditions and the effects of these responses on the equilibrium level and on the occurrence of disequilibria. The methods are those of marginal analysis, and mathematical notation is used fairly freely. Not only the differential calculus usually associated with marginalism but also and especially, the integral calculus is employed, the latter arising out of the evaluation of assets by discounting future returns.

The reviewer owns to some difficulty in fairly evaluating M. Florin's contribution for two reasons. In the first place, the bulk of the results are very familiar to the English-reading public through the work of Fisher and Keynes, but the author claims independence of all economists since Böhm-Bawerk (though there is a brief slighting reference to the two first-mentioned authors on page 25). In the second place, the author has adopted the somewhat unusual procedure of publishing a first edition which is not complete; the table of contents lists four chapters which do not appear in the text but which are promised for a later edition. Among other topics to be dealt with in these chapters are all issues of policy, the theory of international exchanges (including a tantalizing heading, "nécessité d'une balance commerciale déséquilibrée"), and the role of wage rigidity in crises.

The first part of the book is devoted primarily to definitions. Of chief interest is the remarkable attempt to avoid the problems arising from the existence of many commodities by means of Divisia indices of price and quantity. The interpretation of subsequent formal developments depends very heavily on the assumption that a Divisia index of output is truly a

measure of variation in physical magnitudes alone, independent of price variations. That this assumption is too facile is evident from the recent papers of Klein, May and Nataf in *Econometrica*. Another case where the author realizes difficulties but resolves them inadequately is the brief discussion of the measurability of utility on page 7. We need only demand, says the author, that utilities be comparable in the sense of more or less; but on pages 76-77, he speaks unhesitatingly of the diminishing marginal utility of stocks of money.

The second part deals with a capitalist non-monetary economy. For such an economy, he finds that, in equilibrium and at the margin, the rate of interest is equal to the sum of the following three magnitudes: the profitability in current prices of the best unit investment measured in current prices; the relative rate of change over time of the price of the best capital good as compared with the price of all capital goods; and the relative rate of change of the price of all capital goods in the current standard of value. The last term is nothing but Fisher's "appreciation," and the whole proposition seems to be a restatement of Fisher's that in equilibrium the rate of return over cost at the margin equals the real rate of interest. There is one important qualification, however. For Fisher and Keynes, the rate of return over cost (marginal efficiency of capital) is defined as that rate of discount which, applied to all future returns from the asset, will equate them to the current price of the good, while M. Florin considers only the current return from the use of the asset and the speculative gain in the immediate future. Under the assumptions of perfect competition and subjective certainty in expectations, M. Florin is unquestionably correct. But what Fisher and Keynes may have lacked in logic was probably more than compensated for in realistic observation. It appears to be true that entrepreneurs take into account the productivity of capital goods in the future before purchasing them. In the marginal logic, this can only be explained by assuming imperfect conditions in the market for used assets or uncertainty as to prices in the near future.

It is to be noted that the profitability in current prices of a unit investment measured in current prices is a quantity the value of which is independent of the standard of value; the same is true of the relative rate of change over time of prices of new capital goods with respect to prices of all capital goods. The sum of these two quantities is taken by M. Florin to be essentially a technological fact, though this interpretation is certainly open to serious doubt.

With the aid of the above-mentioned relation between the rate of interest and the marginal productivity of capital, the author derives a formula for the value of a capital good by discounting its future returns. On these bases, he argues from an assumption of diminishing marginal productivity of capital goods to a historical law of falling profits in periods of unchanged techniques. Much as Ricardo and Mill, the author foresees a period when investment ceases and the interest rate drops to zero. Unlike these classical authors, however, M. Florin regards this period as a very desirable goal, for output will be at

its maximum while the vanishing of the interest rate means that labor will receive the entire net output, thus solving all social questions. "Le problème économique que notre siècle a à résoudre est de franchir cette marche au seuil de l'âge d'or" (p. 68). It is overlooked that the vanishing of the interest rate means that the value of land, at least, will become infinite, so that the share of the capitalist will not vanish though it may take the exclusive form of rent.

In the third part the author considers a monetary economy. The most important consequence of the introduction of money is the Keynesian proposition that the rate of interest is determined as the marginal utility of holding the stock of money actually in existence. The utility of holding stocks of money arises (pp. 76-77) from imperfect foresight and the costs of obtaining credit or liquidating assets on short notice; this assumption is inconsistent with the subjective certainty and absence of transfer costs assumed elsewhere in the work, but the inconsistency is a common one (*cf.* the work of Professor Hicks or Dr. Lange). The rate of interest is taken to be proportional to the volume of output and to the price level and inversely proportional to the stock of money. This is a purely empirical assumption for which no evidence is offered. These results are combined with the formula for the value of an asset applied to money to express the price level of output in terms of the anticipations of total output, stock of money, and interest rate. The behavior of the price level over time is then studied under various assumptions as to expectations and realizations; the variety of results obtained suggests the need for a more general theory. The same analysis is also applied to find the effects of taxes on investment and on money. The latter, under the assumption of static expectations, will lead to an unchanged rate of interest but a rise in prices proportional to the ratio of the tax rate to the original rate of interest.

The author concludes with some remarks on the nature of economic disequilibria. In essence he suggests that they arise essentially from a discrepancy between the marginal productivity of capital and the real rate of interest. Although the discussion is not too explicit, the impression derived is that the author expects them to arise from unanticipated changes in productivity, very much along the lines of Schumpeter's theory (see p. 96), combined with the incorrect adaptation of wages (p. 110).

The reviewer noticed only two slips in mathematical reasoning: On page 22, it is asserted that a certain function possessed a derivative since it was continuous, which is not sufficient. On page 96, it is asserted in effect that a certain infinite integral converges because the integrand approaches zero as its argument approaches infinity; actually, the latter is neither a necessary nor a sufficient condition for convergence. Neither error had serious consequences for the main argument.

KENNETH J. ARROW

*Cowles Commission for Research in Economics,
University of Chicago*

Volkswirtschaftslehre—ein Abriss der wichtigsten Lehrmeinungen. By RICHARD KERSCHAGL. 3rd ed. (Vienna: Manz'sche Verlagsbuchhandlung, 1946. Pp. xii, 208.)

This is one of the first books on economics to come out of postwar Austria. Though intended to "introduce the beginner to the main questions of theoretical economics," the little volume is much more than a textbook. Like most writers endeavoring to introduce economic theory, Professor Kerschagl is confronted with the vexing problem of whether to plunge the reader into a presentation and evaluation of prevailing economic analysis or to prepare the "beginner" by giving him a background in the evolution of economic ideas. The former alternative exposes the unsophisticated "beginner" to the pitfalls of negativism by filling him with controversial discussions, and may leave nothing but a vacuum. With the conviction that "that which is can only be understood by that which was," the author chooses the second road. "A History of Economic Doctrines" would therefore be an appropriate subtitle for this book.

Professor Kerschagl, who holds the chair of economic theory and finance at the Hochschule für Welthandel in Vienna and who is the author of a respectable series of books on economic methodology, monetary economics and banking, has, with admirable conciseness, summarized and interpreted the development of major economic thinking since the mercantile era. Professor Kerschagl's arguments and discussions are by no means elementary and leave a great deal of close reasoning to the reader. The book seems more appropriate for persons already somewhat acquainted with economics than for the untrained beginner.

The author's approach is that economic thought is conditioned by the economic environment and events of the time (in this respect, perhaps similar to Eric Roll's *History of Economic Thought*), yet he endeavors to separate those economic "laws" or "truths" whose validity endures from the economic views and doctrines which are solely determined by and apply to the economic circumstances in which they are written. Though striving for objectivity, the author's presentation in some places does not escape the flavor of his own rather vague idealism.

After only a few paragraphs on pre-mercantilist thought, the first part of the book deals with the mercantilists and the physiocrats in which the connections between the then prevailing politico-economic changes and the theoretical schools are neatly worked out. There is then one chapter each devoted to a description and explanation of the classical school, the German school, the socialist theories, and the Austrian school. In a somewhat unusual arrangement, the development of monetary theories and currency systems of the respective periods are brought together in an additional, separate chapter. The modern development of economic theory is covered in the next section, and the final chapter, in the form of an appendix, contains a discussion of Austria's contribution to the progress of modern economics. A rich and very helpful bibliography and index of names of authors concludes the book.

Throughout most of the book a subtle emphasis is placed upon two broad controversies accompanying the development of economic thinking since Ricardo; one, the dispute over inductive or deductive reasoning; the other, the time-honored dilemma of individualism *versus* universalism. At times these two controversies tended to run parallel, as in the feud between the German historical school and the Austrian marginalists. Although this controversy was mainly one on method, the historical school also attacked the classicists' mechanistic outlook and emphasized the organic concept of society. This, broadly speaking, corresponds to an attack on individualism in favor of universalism. (Much of this "attack" derives from a confusion of atomism with individualism.) To the Anglo-American reader, it would rightly seem that Professor Kerschagl has devoted too much space (relatively speaking, of course) to these opposing trends as well as to the whole German romantic thought. "Universalist" ideas were hardly of any importance in the English-speaking world and the vague, semi-mysticism of the romanticists is not taken too seriously by Anglo-American economists.

The conflict, however, between the deductive and inductive approach to economics has been a real one and is again conspicuous today (especially in the United States). The Austro-German "Methodenstreit" was resolved, after the "quarrelers" became aware of the fact that the two methods stand not in opposition to one another, but rather complement each other—a realization to which a few of our contemporary economists have, unfortunately, not yet come.

Although he strives to refrain from value judgments and subjective observations, the author is not always successful. For example, his personal lack of sympathy for current socialist thought and systems is unmistakably apparent in his chapter on socialism. He divides the development of socialism into three stages:—Utopianism, Marxism (scientific socialism), and finally socialism as an ethical postulate (or religion, in the broadest sense of the word). Socialist experiments, so we are told, may have succeeded in attaining equality of the masses, but they failed to produce economic betterment. Primarily because of this failure, modern socialism (the third stage) puts the goal of economic betterment into the background and considers its first task that of the salvation of the proletariat from the economic and moral yoke of capitalism. "Socialism becomes an ethical duty, a sort of religion . . ." which strives toward a new social order, not necessarily of economic progress, but in which all power is simply shifted to the working masses (p. 40). There seems to be little doubt that these remarks are intended to refer to present-day communism and Stalinism, but it is open to question whether the book, in its present framework, would not have benefited by an omission of such subjective observations.

The most serious shortcoming of the work under review is the almost complete absence of any treatment of recent developments in economic theory. There is, for instance, no mention of imperfect competition or monopolistic competition. Although Lord Keynes is treated in some detail, the discussion

does not proceed much beyond Keynes' *Monetary Reform* of 1923. The bibliography, likewise, though containing well over 700 titles, is sadly inadequate in references to recent economic works.

Although an index of authors is appended, a badly needed index of subject matter is lacking—this, despite the book's emphasis on ideas rather than individuals. (It is true that the table of contents is very detailed but that can hardly be substituted for a good index.) A few errors have slipped in. For instance, a total of about 24,000 banks is ascribed to the United States (p. 118), and in one place, Jevons is designated as an American (p. 165). These are not serious enough, however, to detract from the scholarship of the book under review.

There is no doubt in this reviewer's mind that, were the present volume more up to date, it would definitely warrant translation. The condensation of its material does not diminish the penetrating insight displayed in many parts. In addition, its particular approach and different emphasis would not only make interesting and informative reading for an English-speaking audience, but it would also provide a welcome stimulant to widen one's perspective.

JOSEPH GRUNWALD

Adelphi College

Readings in Economics: Principles and Problems. By WALTER ADAMS and LELAND E. TRAYWICK. (New York: Macmillan. 1948. Pp. xi, 520. \$3.00.)

This work is intended for the general introductory college course in economics. It can be used to supplement, but not to supplant, the traditional text or texts in economic principles and problems. Instead of an integrated exposition by a single author or several authors, the beginning student here meets many minds presenting various doctrines. The obvious advantage of this method is the ability to get firsthand the best of many statements of different points of view. The equally obvious and serious disadvantage is the unavoidable unevenness of treatment and the absence of syntheses, summaries and conclusions. To meet this deficiency, in part, the authors have supplied short continuities and introductions to their selections of readings.

Assuming the author's case for this type of introduction to economics, which of course is open to doubt and debate, the reviewer is greatly impressed by the skill with which this difficult task of selection and organization of material has been performed. The readings have been wisely and fairly selected; they give wide coverage and great variety; they stress essentials and keep within the horizon of the undergraduate. Although the book is well organized and follows the traditional pattern, it suffers from the almost complete absence of the vital body of economic theory, as developed systematically and didactically in most introductory courses. There is, however, one chart on price determination under monopoly conditions, and there are several articles on that and kindred topics.

Part One, "Principles," moves from an excellent introduction on the scope and method of economics, through production, stressing specialization, mechanization, and large-scale production, through markets, competitive

and noncompetitive, to the great issues of public control over monopoly, oversaving-underinvestment theory, and the full employment-mature economy controversy. Part Two, "Problems," features labor relations, credit and banking, business cycles, public finance and international trade. It is to be regretted that consumption is slighted. Value and distribution, the heart of economic theory, are ignored, or left to a companion text, or supplemental instruction. The reviewer feels that the material in Sections VIII and IX on credit and banking and on business cycles and price levels, respectively, should, from a pedagogical point of view, precede and not follow the earlier discussion in Part One on oversaving and underinvestment.

Sources include such famous writers and familiar quotations as those from Adam Smith on specialization, Böhm-Bawerk on roundabout production, Veblen on technology, Marx on communism, and J. S. Mill, List and Bastiat on protection and free trade. More modern writers include nearly all the great names of our own times, both in the United States and Great Britain. Alfred Marshall, alone, is conspicuous by his absence, which perhaps is another way of saying that the traditional emphasis on, or even inclusion of, value and distribution is missing. John M. Keynes, however, is represented by several excerpts from his more lucid writings, as is also John N. Keynes. For comedy relief and common sense, Mr. Dooley (Finley Peter Dunne) is revived to speak his mind on perennial economic issues. Finally, there are some useful selections from government reports, public laws (especially anti-trust and industrial relations legislation), and research studies, which give vitality and reality to the work.

S. HOWARD PATTERSON

University of Pennsylvania

Economic History; National Economies

Aspects of British Economic History, 1918-1925. By A. C. PIGOU. (London: Macmillan. 1947. Pp. viii, 251. \$3.50.)

In 1941-42 Professor Pigou, at official request, prepared this analysis of the British postwar transition from 1918 to 1925. It was designed as a set of memoranda for use in government departments concerned with problems likely to arise after the end of the more recent World War. The author had access to government files and to certain other data hitherto unpublished. He was assisted by a number of distinguished economists, including Mr. M. Dobb, Mr. D. Burn, and the late Mr. Erwin Rothbarth. The result is an unpretentious series of papers which, despite conscious gaps, presents a fresh and coherent account of the British economy in the six years after the Armistice.

Professor Pigou's essay into economic history is of interest in at least three different perspectives. First, it brings within the compass of unified analysis not only new data on the period, but also a number of specialist studies, which have appeared in other books and in the journals. Second, this volume is one of the few published efforts which attempt an inter-related account of a whole economy in movement over a short period of

time; and it is thus of distinct interest as an exercise in method. Finally, the book raises issues of comparison with present problems of British postwar adjustment and, as it was designed to do, helps to illuminate them, even by contrast.

Pigou first establishes cyclical turning points for the time period he is examining and designates them as follows: The Breathing Space, November 1918-April 1919; The Boom, May 1919-April 1920; The Slump, Summer 1920-Autumn 1922. The Doldrums, which follow, run from the beginning of 1923 to the crash of 1929, although Pigou's analysis ends with 1925. The rough and ready designation of these turning points will be the despair of analysts trained in the technique of the National Bureau of Economic Research; but they serve adequately the author's limited analytic purposes.

Within this general time framework the author examines: the course of employment; industrial production (with special reference to shipbuilding, housebuilding, and cotton exports); the breaking up of the government's wartime control system; the role of monetary factors; and finally, the course of real income and wages. In the analysis of the course of employment, the so-called Z.8 returns are valuable. These returns were based on questionnaires issued by the Ministry of Labour to employers, over the period from the beginning of the war to November, 1920. In some cases, the area covered was exhaustive, and in others the Z.8 figures represent an uncertain sample. Nevertheless, they permit a more sensitive account of the changing constitution of the working force in the immediate postwar period than has hitherto been available.

The theoretical framework which informs the analysis is that which the author developed in his more abstract writing on industrial fluctuations. The boom of 1919-20 is presented as a case in the unfulfilled expectations of over-optimism. The basis for the upswing is established in a backlog of capital investment which followed the war, much of which was once-for-all in character, notably shipbuilding and the replenishing of stocks. In explaining the downturn and slump of 1920-22, Pigou rejects a primary role for the monetary factor, which in his view responded to and then accentuated the depression. In his discussion of monetary factors, Pigou employs flexibly the vocabulary of the Cambridge cash-balances approach. His argument has evoked a nostalgic reply from R. G. Hawtrey (*The Economic Journal*, June, 1948) who contends for a more central place in the downturn for a restrictive Bank rate policy. Although theorists more recently educated may look for an approach in terms of the national income and its changing components, Pigou makes clear in a painstaking analysis the limitations of such data for the relevant years.

The postwar boom and slump was, of its nature, so international a phenomenon, and in the case of Britain so linked with export markets on the industrial side and with the New York market on the monetary side, that it cannot be fully dealt with on a national basis. Nevertheless, Pigou's account, frankly limited in its intent, is satisfying history and analysis.

In publishing this book the author was acutely aware of the limited analogy of his period with the likely sequence after the second World War.

In its final pages he draws only the broadest of lessons. Two striking differences in Britain's problem after the first world war as compared with the present position are the ease with which the balance-of-payments problem was then solved and the prompt return to prewar (or higher) levels of real wages. Most of the factors accounting for the difference are now familiar and widely agreed. Pigou's concluding chapter "The Upshot for Real Income and Real Wages" emphasizes, however, the striking favorable shift in the terms of trade from 1913 to the postwar years which cushioned the whole transition and may later have helped to lull British domestic economic policy into the inaction which characterized its course down to 1931.

Between 1913 and 1924 the favorable shift in the terms of trade for Great Britain was about 20 per cent. Real wages were probably somewhat above the immediate prewar level for the period 1920-22; and only slightly below from 1923 to 1925. Britain garnered the benefits, in cheap foodstuff and raw material prices, not only of wartime expansion in the Western Hemisphere, but also, which is often forgotten, a decade's massive investment before the war in Canada, the Argentine, South Africa, and Australia.

The decade before 1939 saw no such period of development of new areas and resources; while the wartime expansion of production in the Western Hemisphere has failed to outweigh the deterioration in supplies from other sources. Population has continued to rise. There have been complications of land reform and newly assimilated standards of food consumption. As a result, the cities have suffered serious relative disadvantage, as have countries which are predominantly urban.

It is too early, perhaps, to weigh exactly the relative importance of this imbalance in world production and prices in the years since 1945, as opposed to other forces determining the character of the European and world reconstruction problem. The evidence is, however, that this element, and its remedy, have not yet been fully appreciated.

W. W. ROSTOW

Geneva, Switzerland

Regional Planning in India. By R. BALAKRISHNA. (Bangalore, India: Bangalore Printing and Publishing Co., Ltd. 1948. Pp. 424. Rs. 20.)

The author describes this book as an attempt to coordinate locational dynamics with economic planning in order to arrive at a suitable regional plan for the economic development of India. The book falls disappointingly short of this goal, however, for the reader who considers economic development to be a broader concept than the industrial development with which *Regional Planning in India* is primarily concerned. It is disappointing, too, in its failure to appraise realistically the difficulties in the way of India's economic development, the need and desirability of which are unquestioned.

In this book the author has presented, with occasional details, a general plan involving the "substantial modification of the capitalistic system" which he believes to be a prerequisite for any successful effort in the industrial development of India on a regional basis.

After an initial consideration of location theory, the growth of industry

in India since late in the nineteenth century is discussed with particular attention to eight major and a few minor industries and their relative concentration or scatter. This section, and the succeeding ones which are concerned with the distribution of resources throughout India and with the wartime expansion of industry, will probably be of some interest to those unfamiliar with India's industrial economy. However, the discussion of concentration or scatter is in terms of outdated statistics, those for 1937 being the most recent. It is also without reference to the fact that India's total industrial population is probably not in excess of 10 million, with large-scale factory employment less than half that amount and inadequate to the needs of the country's 300 million people. Some of the author's conclusions regarding distribution of industry are of questionable practical value in the light of the foregoing.

Likewise, the writer's consideration of the possibilities of establishing industries at various points in India because some of the physical factors required by those industries can be found in such localities, minimizes unduly the difficulties in the form of untrained labor, inadequate transport, limited markets, and other factors which, until the present at least, have hindered such development or directed it to locations economically more feasible.

The author has thereafter included a discussion of the essentials of planning in general terms and of various of the plans, Bombay and others, which were advanced prior to partition, concerning the economic development of India.

The remainder of the book is devoted to a consideration of the effects of transport rates on regional planning, the need for State control of a wide area of economic activity, and the type of structure necessary in the reconstructed, largely state-directed economy, for which the author's predilection is evident at several previous points. The book concludes with a chapter on the consequences of partition written after it went to press and which in the nature of things is understandably superficial.

In this last chapter, some attention is given, however, to the need for improvement in Indian agriculture. Failure to make the point earlier and with greater emphasis is a major defect in a book purporting to deal with economic development on a regional basis. However rapid is India's industrialization, India will be predominantly agricultural for some time to come. However necessary it is to industrialize and to do so rapidly, the need for improvement in Indian agriculture cannot be ignored or long delayed. In an area with nutritional standards so low, with agricultural productivity comparing unfavorably with many regions of the world, with substantial dependence on the imports of food and other agricultural products, a widespread improvement in Indian agriculture would provide significant assistance to India's industrial advance. It is, moreover, one of the main points at which governmental assistance is essential, for private enterprise in Indian agriculture cannot effect the wide-reaching changes necessary in this field. With such agricultural development would be required improvement in both rail and road transportation, another important field for governmental effort. The multiplying effects of major and successful undertakings in these two

fields in terms of complementary and secondary employment should be far-reaching and should include industrial development, as well as other benefits.

As a practical matter one may wonder at the apparent confidence of the author in the State's ability to direct and to control so much of the economic development of India. The job to be done in that country is colossal and the talent, while of high order, must be spread incredibly thin. Statistical and other data necessary for planning on the scale indicated are inadequate and outdated. The difficulties inherent in these factors are either ignored or dismissed with little discussion.

EDWIN G. MOLINE

Washington, D.C.

Economic Systems; Planning and Reform; Cooperation

Are These Hardships Necessary? By ROY HARROD. (London: Rupert Hart-Davis. 1947. Pp. 178. 5 s.)

Ordeal by Planning. By JOHN JEWKES. (London and New York: MacMillan. 1948. Pp. xi, 248. \$3.75)

Planning and the Price Mechanism—The Liberal-Socialist Solution. By JAMES EDWARD MEADE. (London: George Allen & Unwin Ltd. 1948. Pp. xi, 130.)

These three books are evidence that the spirit of independent criticism is still alive in England. It may even be said that they are a contribution to that reassertion of faith in economic verities of which there has been increasing evidence among British economists since their release from the cramping influences of government service. Some of the difficulties in reasserting their economic faith, however, cannot be attributed to back-slidings encouraged during the long wartime silence, but are due rather to the doctrinal excesses if not actual heresies of the prewar era. Popular ideas on the unimportance of the state of the budget, on latitude to invest capital gaily regardless of the volume of savings, and on the theory of foreign trade, of which Mr. Harrod complains, may be argued to be a case of the Keynesian economics reaping where it had sown. This argument is strengthened by the fact that, while Mr. Harrod preaches that "re-education in the understanding of the basic principles of money and pricing is now needed," he will not himself re-admit the rate of interest as one of the regulators in the price mechanism. Professor Meade, on the other hand, goes a long way in reinstating interest rates as a part of the pricing mechanism, despite the fact that opening up the possibility of gains to speculators (who occupy a prominent place in his lively imagination) is offensive to his moral sense.

The central thesis of Mr. Harrod's book is that the main cause of Britain's troubles in 1947, when ground won during 1946 in the battle of recovery was lost again, was over-investment. Blame for the excessive capital outlay is placed squarely on the government, which had sponsored too many programs for the reconstruction and development of basic industries and too big a housing program, while at the same time failing to keep the capital schemes of private industry within the bounds imposed by the volume of national

savings. The consequence was "inflationary pressure," the term used by Mr. Harrod to describe an "excess of total demand over total supply at home." Employing the Keynesian analysis in terms of aggregates, he attributes this excess of demand to (or identifies it with) the excess of current domestic capital outlay over current domestic saving; and it is axiomatic that this in turn is identical with the adverse balance of current foreign payments.

The danger of over-simplification in this analysis is obvious, and it is in keeping with the Keynesian tradition. But simplicity was necessary to the fervour of the politico-economic tract that Mr. Harrod set out to write at white-heat. Although an English reviewer (Mr. F. W. Paish, *Economica*, February 1948) could claim that Mr. Harrod had seen his "major recommendations not only accepted but put into effect by the government, all within a period of four months," by the downward revision of its plans for capital creation, nevertheless the victory must appear dubious to Mr. Harrod. For his thesis was that, while another turn of the screw of austerity might be justified temporarily by the facts (if they were known), yet the adoption of a more sensible domestic policy that paid greater attention to the merits of free choice, combined with the right external policy, would hold out hope of improvement in the standard of life quicker than was possible under the policy of the labor government in its first two years. Policy has not changed and no significant relief from austerity is in prospect.

The necessity of Mr. Harrod's panegyric on the price mechanism even in a popular tract is indicative of his strong feeling on the contrast between the present system of controls and what he conceives to be Britain's real need. But it also shows to what a pass the neglect of the economic verities can bring us, when Mr. Harrod must solemnly acknowledge his indebtedness to another British economist for opening his eyes to the fact that rent restriction not only depresses the supply of unsubsidized new houses but encourages extravagance in the demand for housing accommodations!

Mr. Harrod is provocative in his examination of the international position. In the circumstances of European over-spending he asserts that the "allegation of a 'world dollar shortage' is surely one of the most brazen pieces of collective effrontery that has ever been uttered." He deals severely with the British policy that used up American dollars in releasing wartime-accumulated sterling balances and by failing to stop leakages of capital abroad. In fact he does not disguise his belief that it was dishonorable to use up the American loan by excessive capital creation at home and debt repayment abroad. Moreover, he argues ingeniously that the convertibility obligation of the Anglo-American Loan Agreement gave Britain a strong card in insisting on blocking sterling balances and that impending convertibility before July 15th "may well have saved the country hundreds of millions of pounds." But the most important point he makes on Britain's international position is the admission that in sponsoring the doctrine that each country must be free to adopt "expansionist domestic measures to maintain full employment at home" a nation may "carry out capital outlay programmes far in excess of the need to maintain full employment and of the savings of its own people." This is the first recognition by British economists, as far as I know, that the doctrine

of hands off domestic economic and social policy, which has been a British sheet-anchor in postwar international negotiations, may be inconsistent with the doctrine that good behaviour requires each country to have regard to the international repercussions of domestic policy.

His essay on "The Practical Consequences of Nationalising the Bank of England," reprinted as an appendix to Mr. Harrod's volume, may prove to be less ephemeral than the rest of the book. The anonymity that enshrouds British civil servants does not now hide the fact that Mr. Harrod was in a position in Whitehall during the war to appraise the influence of the Bank on economic policy. His judgment is that the Bank's "view may best be defined as the technician's view," and that "there may be wider objects of policy, the importance of which [the technician] is not well qualified to weigh." It would, for example, "be contrary to human nature to expect the Bank to be an enthusiastic advocate of the International Monetary Fund. It is bound to hark back to the world leadership and control which it exercised for so many decades before 1914." It is also unlikely to be a staunch advocate of a movement to freer international trade but "to fall victim to the illusion that these fascinating war-time techniques [of economic warfare], handled with such art, can be applied in peace-time too." For these reasons Mr. Harrod believes that formal nationalization of the Bank was a mistake, because it "has gone far to resurrect the power of the Bank and puts it much nearer where it was before its practical dispossession in 1932."

Professor Jewkes' book is also a politico-economic tract, effective in its purpose of revealing the seamier side of planning from the British record, and kept on a high level of polemical morality. He is another wartime civil servant who, having shed his anonymity, is trying to interpret British central planning in the light of his wartime experience. His examination eschews the more technical economic analysis, and indeed this is neither necessary nor desirable for his purpose, which is to meet the advocates of planning on their own ground. Their arguments, while starting in and even maintaining a façade of economics, extend to politics and morals, and Professor Jewkes rightly believes that the "stakes are moral and spiritual." In this respect he is generous in admitting his indebtedness to Professor Hayek's *Road to Serfdom*.

There is nothing of the reactionary in Professor Jewkes' book. He accepts with approval the fact that the Keynesian economic doctrines offer "us a route towards the maintenance of full employment within a free society." He recognizes that "every sensible economy is a 'mixed' system" in which government has a part to play. But he reminds us that despite the wide acceptance of the new-fangled ideas on central planning they are of recent origin, and like most popular economic ideas they are not necessarily well-founded. He attributes the rapid spread in this case to (1) the desire to avoid mass unemployment; (2) "the growing feeling that men must be masters of their economic destiny"; (3) the belief that planning is "scientific"; (4) the assumption that State intervention can greatly increase wealth; (5) the craving for economic security; and (6) dissatisfaction with inequalities in the distribution of wealth.

The foundations of these beliefs are examined in chapters on the economic

arguments, on the characteristics of planners and planning (in which the oracular pronouncements of British statesmen are subjected to cold scrutiny), and on the moral and political features of planning. He sets up no straw men to knock down but examines the best arguments for central planning as such that he can find. His analysis shows that ignorance of the existing economic system of private enterprise, the refusal to compare its defects with the known defects in competing existing systems, and failure to look below the surface of blue-prints, all play their part in explaining the widespread appeal of central planning. Professor Jewkes destroys many economic and other illusions that contributed to the contagion of planning and he reveals central planning as a system that "ultimately turns every individual into a cipher and every economic decision into blind fumbling, destroys the incentive through which economic progress arises, renders the economic system as unstable as the whims of the few who ultimately control it and creates a system of wire-pulling and privileges in which economic justice ceases to have any meaning."

This may seem to many too strong an indictment, and it would be if it were applied immediately to Britain. But Professor Jewkes' observations confirm that the tendencies are at work. He shows that, despite the brave words of responsible statesmen about the maintenance of freedom in British socialism, the government has been pushed relentlessly to direct labor and to destroy enterprise and independent thought and criticism. The loss of liberties is exhibited by a list of petty and foolish restrictions, culled from "a casual reading of newspapers," which reflects both the rank inefficiency of bureaucracy and the "moral sickness of a planned society." It is exhibited even more strikingly by the revelation that 10,916 government officials in seventeen Ministries are "authorized to enter private houses and premises" to carry out inspections and investigations without a search warrant. It is charged that "snooping" requires a body of plain-clothed police hardly distinguishable from *agents provocateurs* and at best creates a "sordid atmosphere which . . . everywhere sets one man against another."

The moral weakness of the planned society is finally depicted in its obsession with material ends. Professor Jewkes concludes that "in the last analysis the spiritual content of planning proves to be a sham." And he contrasts the planned economy with the market economy in which "no one need ever claim that economic activity is the highest form of activity" instead of simply the means of allowing us to "get on as uninterruptedly as possible with the development of the real art of living and the discovery of those forms of human relations which will bring us the ideal society."

Professor Meade's subtitle implies that he is the socialist among these three authors. Apart from the question, however, whether "liberal-socialist" involves a contradiction in terms, it is difficult to see in what respects if any he is a socialist. His book grew out of a—presumably critical—review of a pro-planning volume by Sir Oliver Franks. He confesses that he is no planner if the latter "necessarily believes in a quantitative programme of output, employment and sales for particular industries, occupations and markets and the

exercise of such direct controls by the State as are necessary to carry this out." Professor Jewkes argues convincingly that these earmark the beliefs of the planner and socialist. Professor Meade confesses further that he is only a planner if the "anti-planner necessarily denies that the State should so influence the working of the price mechanism that certain major objectives of full employment, stability, equity, freedom and the like are achieved." Professor Jewkes would say that these objectives, properly defined, earmark the liberal. And, in fact, Professor Meade's conception of his thesis, and the showing of his whole book, confirm that whatever he may once have been his economic doctrine is now in the main liberal.

His thesis is that "a large measure of state foresight and intervention is required to guide the economy from war to peace, to prevent inflationary and deflationary pressures, to ensure a tolerably equitable distribution of income and property, and to prevent or to control the anti-social rigging of the market by private interests, but that these objectives can be achieved in an efficient and a free society only if an extensive use is made of the mechanisms of competition, free enterprise and the free market determination of prices and output."

Unfortunately no systematic attempt is made to subject the record of the Labour government to these tests, and therefore Professor Meade's liberalism and his socialism remain untested. What stands out in his book, however, is the ethical note in his thesis. He is for "the unthrottling of the incentives of private initiative" but he dislikes the idea of "scarcity windfall profits" that may be associated with the use of the price mechanism. No attempt is made to define his concept of equity in distribution or to solve the problem of generalizing his and all the innumerable other concepts of "a tolerably fair distribution of money income and property." Nor is there any attempt to assess the total probable effect on incentives of state intervention for the purpose of removing the element of chance in the economic universe. He has too little faith in the price system to assume that if speculators can make money easily, all will want to cash in and the "opportunity" will melt. And, finally, he does not produce any support, other than a wordy and almost meaningless quotation from Mr. Atlee, for the statement that the British system represents a middle way between the communism of the Soviet Union and the capitalism of the United States—a cliché that has now worn very thin.

These features give the book, despite much good economic analysis, an air of unreality. This is enhanced by a tendency to over-estimate the practicability of theoretically *recherché* devices, such as the auctioning of import licenses as a means of diminishing the discriminatory effects of import controls, or to over-elaborate his analysis. An example of the latter occurs in the discussion of foreign trade policy, which is the best part of the book. By his dictum that the adjustments from exchange depreciation by a group of deficit countries are likely to occur (on the implied assumption that the rest of the world is small) mainly in the imports of the group, whereas those from depreciation by a small single country are likely to occur mainly in that country's exports, he gives a false appearance of contrast. Depreciation by the group of coun-

tries represents appreciation by the rest of the world, and the smaller it is the more likely is appreciation to operate on its exports (which are the group's imports) to decrease them, just as depreciation would have increased them.

There are so many good things in his analysis of the international problem that it is a pity Professor Meade is not more explicit on his own views of British policy. He does not seem to me to come out as flat-footed as he should against discriminatory import restrictions in view of his own shattering argument against them. He even gives the impression that if Britain could get away with discriminatory monopsony it would be all right with him—which for such a stern moralist on domestic monopoly issues is surprising. I sense that he suffers from a complaint that has afflicted British policy-making for a long time, the failure to make a clear distinction between the unescapable shorter-run problem of the transition from war to peace and the ultimate aims that give meaning to the transition. He wants teeth in the International Monetary Fund to insist on appreciation or depreciation in the interest of flexible exchange rates, but he does not ask whether international obligations extend to domestic behaviour that will prevent deficit countries from getting into or remaining in that position. Yet this question will remain pertinent long after the present difficulties of European countries, whether or not they are all the heritage of war, have been overcome.

In a more subtle way the same disease prevents Professor Meade from being explicit enough on the virtues of some countries simultaneously lending and borrowing, to do justice to the importance of restoring the network of international lending. Abstracting from political considerations, Britain should be glad to borrow on longer term from America and to lend for shorter periods to the whole world. British banking as well as technical know-how is still needed. New York has not yet duplicated all London's banking skill, and the release by appropriate British government action (even if it included more liberal travel abroad) of the entrepreneurial spirit in merchant banking would pay handsome dividends direct and indirect, to Britain and to the world. But the obsession with the short-term problems that make exchange-control inevitable inhibits all thinking on the long-run problem of encouraging capital export.

Each in its own fashion, these three books exhibit the vitality of economic thinking in England and show that freedom of expression is still open to those who make bold to be critical, despite Professor Jewkes' very proper fear for independence in the socialist state. It will be a sore blow to faith in democracy if writing of this kind fails to have any effect on policy.

REDVERS OPIE

The Brookings Institution

Economic Security and Individual Freedom: Can We Have Both? By ALBERT LAUTERBACH. (Ithaca: Cornell Univ. Press. 1948. Pp. iv, 178. \$2.50.)

It is doubtless all to the good that in times such as the present when so many fundamental social and economic issues are being subjected to critical examination everywhere the general reader should have a wide choice of

popular manuals to which he can turn as he seeks to understand the heated controversies of today. Many to whom these things have been a matter for concern for some time may perhaps feel that the general issues have already been adequately and often better covered by earlier writers, and that it is now high time to go beyond the vague generalizations to which popular manuals must always of necessity confine themselves, but the young voter of today would probably find that a book written a few years ago read somewhat strangely and might prefer something bearing the datemark 1948.

A reviewer is therefore not entitled to reproach Professor Lauterbach for having induced him to spend some time in working through an analysis of the interrelated problems of economic security and individual freedom without making any notable addition to the complex of ideas and feelings which had been left in his mind by earlier reading and reflection in this field. But at the end of the process the reviewer is in some embarrassment to decide what he can usefully say about Professor Lauterbach's book. It would profit little merely to list on one side the points on which he agrees with the author, and on the other those from which he dissents. But any other course is made difficult by the fact that there is not enough tough substance in the argument to make it easy to get a firm grip anywhere, unless one is prepared merely to rehash controversies, many of which have already been worn rather threadbare.

Professor Lauterbach has a commendable sense of the urgent necessity for mankind to learn its lessons quickly, but the precise content of the lessons to be learned remains obscure. He is firmly convinced that economic security and individual freedom are not inconsistent, and rightly insists upon the confusions of thought which the uncritical use without precise definition of words like socialism and freedom often encourages, but there is no penetrating analysis of the implications of the widespread and quite understandable claims for economic security, and little help is given to the unskilled reader who is anxious to avoid the confusions of thought against which he has been warned.

The concept of social planning may, or may not, be "a good thing," but an author who repeats with approval a quotation in which it is assumed that the fact that "The Ford Motor Company plans" is relevant to the discussion is not giving the young voter of 1948 any real assistance in learning the lessons which press so urgently upon him. It should not be thought enough in 1948 to affirm that "what really matters is an effective control of organized society over economic development." The discussion of methods for making control effective, important though it sometimes may be, is essentially merely a matter of machinery. What is really important is to know what the machinery will do, and how it will do it, and on these urgent, strictly elementary questions, Professor Lauterbach offers little guidance.

A general economic plan, he tells us, would start out from a comprehensive picture of the resources available for use, compare these resources with the patterns of national consumption, and with the purchasing power available to the various groups of consumers, and then would "finally attempt to ar-

range both the use of the resources available and the distribution of national income among the major social groups in such a way that it all 'comes out' on an adequate level of supply and consumption" (italics supplied by reviewer). Such vague, broad generalizations were perhaps pardonable when discussions such as this were necessarily directed mainly to the future, but in recent years sufficient experience has been accumulated in many countries to justify us in expecting that writers in the field will take some pains to make clear the difference between statistical analyses, however ingenious and penetrating, and effective economic policies.

The present reviewer finds no difficulty in examining on its merits specific proposals for state ownership of particular industries. Until he was over twenty-five he had never seen a railway train that was not owned by the state, so that the state control of railroads does not seem to him an exciting issue. He agrees that the violent economic fluctuations of the last twenty years were scandals which should not and need not be allowed to recur. But general arguments in favor of "social control of economic life," whether or not they are defective in detail, seem to him objectionable mainly because they usually fail to direct attention to the real economic problems which confront the world today. Professor Lauterbach is aware of the danger of continuing to fight the last depression, but though our current problems are highly relevant to the relationships between economic security and individual freedom, he has very little to say about them.

ALLAN G. B. FISHER

Washington, D.C.

Stalin and German Communism—A Study in the Origins of the State Party.

By RUTH FISCHER. Preface by Sidney B. Fay. (Cambridge: Harvard Univ. Press. 1948. Pp. 687. \$8.00.)

The sequence of events which led to the russification of the Communist International and the abortive intervention in German communist affairs assume added significance in the light of Soviet Russia's aggressive expansion during the years 1945-1948. Accordingly, *Stalin and German Communism* is a valuable and timely contribution to current history of world affairs. Though this book deals with controversial issues and personalities, sinister motives and lofty ideals, which are not readily comprehensible to the American public, it is an interesting, readable history of the German and Russian communist parties from 1918 to 1929. The author is largely concerned with recording the subterranean methods used by Stalin in achieving control of the parties in these two countries and the gradual entrenchment of National Bolshevism in Soviet Russia.

During the first world war, as a young student at the University of Vienna, the author joined the Social Democratic Party of Austria and became an active leader of these "Left Radicals." The Bolshevik revolution in Russia stirred the idealism of these "Left Radicals." Shortly after the collapse of Austria-Hungary, a Bolshevik delegation from Moscow, disguised as a Red Cross mission, helped her to found the Communist Party in Austria, which

became affiliated with the Communist Third International—*Comintern*. Within a year, discouraged with the slow progress of the party in Vienna, she moved to Berlin, which she believed had become the real center of the revolutionary struggle in Europe. In November, 1921, Ruth Fischer was elected chairman of the Berlin Reichstag. From 1924 to 1926 she was a member of the Comintern Presidium, where she defended the views of the Left Opposition led by Leon Trotsky and Gregory Zinoviev. She incurred the wrath of Stalin because she revolted against the totalitarian methods to transform the Comintern into an agency of the Russian State Party. In 1926, she was expelled from the German Communist Party which had fallen into the hands of Stalinists. When Adolf Hitler seized power in 1933, she fled to Paris and in 1940 came to the United States.

World communism as currently directed by the Kremlin adds credence to the author's thesis that fascism is an aberration from communism and not its antithesis. First by imitation and later by absorption, the nazis took over the institutions, the slogans, the methods, the brutalities of the Stalinized German Communist Party. This documented study explains also that the present Socialist Unity Party in the Russian Zone of Germany is a combination of the most effective elements of its two parents: the nazis and the communists. Hence, the book is an authoritative record of some of the most significant events of our generation.

Bolshevism, as envisaged and interpreted by Lenin, the intellectual godfather of communism, was fundamentally different from the National Bolshevism later expounded by Josef V. Stalin. Mrs. Fischer makes it abundantly clear also that this basic divergence was reflected in their diametrically opposed attitudes towards Germany. Lenin and his co-founder of the Soviet System, Leon Trotsky, had hoped that the real drama of the World Revolution would unfold in neighboring Germany, where the workers of the most industrialized nation in Europe would assume leadership of the new world struggle for socialism.

Lenin contended that socialism in Russia was possible only in alliance with one or more technologically advanced countries, in particular with Germany. Since Russia was a peasant country, this alliance meant specifically that the Russian peasant would be induced by the incentives that industry offered to change his centuries-old way of life, to become first a farmer and then a cooperative farmer. Moreover, in the Left Wing of the Social Democratic Party in 1914, Germany had one of the strongest and most conscious anti-war movements. But the German revolution of 1923 was abortive and Lenin died. In his place, Stalin stepped in as the apostle of a new Russian nationalism and of National Bolshevism and builder of the totalitarian Communist Party machine and of the Russian police state under the guise of proletarian dictatorship.

The history which Mrs. Fischer records, covering the period 1917-1929, is a notable addition to the contentious and multitudinous literature on the inner factional struggle for power of the Communist Parties in both Russia and Germany and for the early control of the Communist International. She

cites chapter and verse, both from memory and research, to show how Stalin transformed the Comintern and the German Communist Party into agencies of the Russian State Party and how foreign communists were transformed from revolutionists into tools of aggressive Russian nationalism and of its state policy. These events assume added significance in the light of Soviet Russia's current aggressive expansionism and of the "cold war" between East and West.

Under Stalin's direction, terrorism as an instrument of national policy to achieve and retain supreme power has become so institutionalized that it defies comparison. The coterie of men who direct the destinies of the State Party are dangerously fanatic idealists and their disciplined devotion, exemplary energy and loyalty to Russia and its infallible *vozhd* (leader) constitute the combined threat and challenge to free men everywhere. The methods employed recently to dominate Roumania, Poland, Hungary, and Czechoslovakia are parallel to those used by the Stalinist in dominating the German Communist Party. The pattern was set in Germany twenty years ago.

In presenting a systematic record of this sequence of events in its contemporary perspective, Mrs. Fischer offers valuable explanation that will help in understanding the dynamics of Soviet Russia's expansion. The preface by professor-emeritus Sidney B. Fay and the publication of this book by the Harvard University Press enhance the authenticity of Ruth Fischer's story.

CHARLES PRINCE

New York, N. Y.

Business Fluctuations

Trends in Output and Employment. By GEORGE J. STIGLER. (New York: Nat. Bur. of Econ. Research. 1947. Pp. 61. \$1.00.)

This volume is an interim review of the National Bureau of Economic Research studies of production, employment, and productivity from 1899 to 1939. These studies have now been carried on over ten years and twelve separate reports have been issued. The fields already covered are manufacturing, mining, agriculture, and gas and electric utilities. Further reports dealing with transportation and the service industries, and a comprehensive summary and interpretation will follow.

These reports include indexes of the physical volume of production, of employment, and of productivity for each of the major industry groups mentioned, and for many subgroupings, including about 150 individual manufacturing industries. While these are not the only such indexes available, they are the most comprehensive and precise.

Mr. Stigler has combined the separate indexes computed for each of the major industry groups into composite indexes and briefly analyzed their behavior. (He includes also unpublished indexes for steam railroads.) He is careful to point out many limitations of these statistics. It has been impossible to make adjustments for changes in the quality of commodities and of labor, for the shift of activities from the household to the factory, and for unem-

ployed workers "attached" to these industries. Despite these limitations, the indexes constitute the major contribution of these studies.

Of the substantive findings, the most significant is that while output in these industries tripled, man-hours of employment remained about the same. That is, with the same labor input, these industries produced three times as much in 1939 as in 1899. In view of the fact that they cover about forty per cent of total output in the United States, we have here an important and impressive measure of economic progress since the turn of the century.

The indexes show that the rise in production occurred during the first thirty years of the period covered. Output during the 1930's was relatively low; in fact, not until the last year of the decade was the 1929 level of production again reached. Productivity, on the other hand, rose most rapidly during the 'thirties. This intriguing relation is, regrettably, left for future exploration.

Two other findings may be mentioned. First, the relative importance of manufacturing among the six industries covered increased substantially over the forty-year period, mainly at the expense of agriculture. Manufacturing output advanced from about 50 to a little over 60 per cent of the total for these six industries, while agricultural output declined from over 30 to about 15 per cent. A corresponding shift took place in employment. And second, changes in productivity have been very uneven, over time and among industries. Thus, the average increase in output per worker per decade for these six industries was 14 per cent, compared to almost 50 per cent between 1919 and 1929. For individual manufacturing industries the percentage change in output per worker between census years varied from -18 to +36, while the standard deviation of these percentage changes fluctuated between 3.2 and 7.6 per cent.

Mr. Stigler stresses the importance of distinguishing between changes in output per worker and changes in efficiency. Changes in efficiency are defined as changes in output per unit of all the factors of production rather than the factor of labor alone. To illustrate the significance of this distinction, Mr. Stigler presents some exceedingly rough measures of changes in efficiency for broad groups of manufacturing industries. They show increases that are somewhat smaller than the increases in labor productivity. As might be expected, they indicate that changes in labor productivity are poor approximations of changes in efficiency in industries where labor costs are small relative to total costs.

This study is a welcome review of ten years of work on a major economic project. A definitive evaluation of this volume, and indeed the whole project must, however, await the publication of the remaining volumes, and particularly, the final summing up.

JULIUS SHISKIN

Washington, D. C.

Arbeidsduur en Welvaartspieil. (Hours of Labor and Level of Prosperity.)

By P. J. VERDOORN. (Leiden: H. E. Stenfert Kroese's Uitgevers-Mij. N. V. 1947. Pp. 275.)

In this new study Dr. Verdoorn, known by his *The Increasing Rigidity of*

the Cost of Production,¹ is attempting to systematize and analyze the so far rather heterogeneous elements concerning the demand for and supply of hours of work which are found in economic literature.

The author starts with an analysis of the "optimum" hours of work. For the employer, the optimum hours are those for which the weighted productivity of the marginal worker and of the marginal hour are equal. The demand for hours of work is affected by changes in (a) the relationship between the productivity of the marginal worker and that of the marginal hour, (b) marginal costs in their mutual relation, in particular marginal wages and (c) the volume of production.

Concerning the supply of hours by the workers, Verdoorn demonstrates how the curve extends from the lower right to the upper left, the horizontal axis representing hours per workday and the vertical axis the hourly wage rate. Dynamically, many factors such as the difficult-to-measure preference for leisure may give the curve a different shape.

After a historical summary on hours of labor in several countries (written by Mr. J. E. van Dierendonck), the author further analyzes the theoretical aspects. With Cassel he rejects the disutility theory because an increase of wages is usually accompanied by shorter and not longer hours. While Cassel bases this rejection also on the absence of influence of the individual on hours of labor in modern labor contracts, Verdoorn supports Frisch's point of view that in collective wage agreements an average opinion of the group of workers involved is visible.

Applying the theory of imperfect competition and using indifference curves, the author constructs more refined curves of demand and supply of hours of labor and demonstrates how different points of "equilibrium" are possible which form an "equilibrium zone."

The author, in chapters on the relations between hours of work and shortage and abundance of labor, respectively, examines the effects of changes in work hours on production, employment, income, wages and prices. Interesting statistical observations on the effect of shorter hours on labor productivity are quoted. Under conditions of high employment and shortage of labor, a choice can be made between longer hours and additional workers. In this connection the author points out the necessity for research work in individual industries. In times of acute commodity shortages, an advantage of longer hours over additional marginal workers is that in the latter case the increased wages, necessary to attract this marginal manpower, will spread to the other workers and thus enhance inflationary tendencies as opposed to the limited effect of overtime pay.

Verdoorn gives an astute analysis of the relation between labor abundance and hours of work. The effects of diffusion (spreading) of work are distinguished in primary and secondary reactions. Primary reactions concern the interrelation between hours and productivity, secondary reactions are, *inter alia*, those affecting demand for the product in question as a result of changed production costs. As an instrument of business cycle policy the

¹ Reviewed in this Journal, September, 1947, p. 675.

author would like to see a general diffusion of labor (if any, depending upon the circumstances) combined with a government subsidy to the workers. Such a subsidy should compensate the decrease in each worker's hours and weekly pay. The subsidy is preferable over fluctuating tax rates à la Hansen because the volume of purchasing power can be more accurately fixed, and a certain stability in tax rates, creating a favorable atmosphere for business, can be maintained. In many respects shorter hours are also better than public works, *inter alia*, because they can be initiated or terminated at any time, and since they can be applied where unemployment prevails and without transfers of workers to different work. Furthermore, a subsidy will have an immediate and favorable effect on consumption.

The treatment of the imperfections of the market for work hours and the "leisure preference" might—to this reviewer's mind—have been more extensive. Also, the book might have been somewhat more lucidly organized, for instance by putting the historical survey in an introductory chapter or in the appendix (which has an interesting mathematical analysis of the influence of hours of labor on productivity).

This is a stimulating book and the treatment of the subject is refreshing. It is regrettable that no English summary was provided.

JOHAN KAUFMANN

Washington, D.C.

A Creative Capitalism: Intended to Reveal Where Depressions Start, Where Lasting Cure Must Begin, and How Cure Can be Had Within the Capitalistic System of Private Enterprise. By JOSEPH E. GOODBAR and LORENZO U. BERGERON. (Boston: Boston Univ. Press. 1948. Pp. xii, 376. \$3.75.)

Three ideas in the study of economic change which have been given major attention in recent years are income flows, leakages, and secular stagnation. Starting with these ideas, differing conclusions will be reached depending on the type of simplification employed and the lines of causation accepted. These three ideas are the basic ones in Goodbar and Bergeron's book, although they never employ the words leakage and secular stagnation.

The amount of current selling price on current output is held to outrun the amounts of buying power in use by individuals. Under-disbursements by business and over-saving by individuals are said to develop in prosperity.

The authors propose incentive taxation and "safe-keeping deposits" to keep these discrepancies from occurring. Incentive taxes are to be prohibitive income taxes levied against businesses and individuals if cash outgo is less than cash intake. To permit the purchase of existing property and securities, it is proposed that the burden of expenditure pass on to the seller of such property. If no other good use can be found for funds, government safe-keeping deposit is to be available, making simple the avoidance of the penalty tax. The funds so obtained are apparently to be interest-free for two years and thereafter levied an annual charge of two per cent for safe keeping, and

are to be employed for reforestation, water control, soil conservation, and generally for resource conservation and development, but not to enter into competition with private industry.

The authors are impressed by the evidence given in the TNEC hearings that expenditures are likely to be in the magnitude of ten billion dollars short at full-employment levels. One would think, therefore, that a constant increase in the national debt should be expected, although possibly at zero interest. No mention is made of this prospect, but on the contrary, it is proposed that a five per cent tax be levied on value added to greatly reduce the war debt.

The reviewer must conclude that unlimited faith is placed in the effectiveness of incentive taxation. Difficulties not faced are the potential inflationary situation created if, as a minimum, "expenditures" must equal income, while in an expanding society, many units must at times spend much more than their intake; failure to provide any offset for the net expenditure decline which will occur with a decrease in the number of new businesses formed and an increase in the number failing. The safety valve of government expenditure on resource conservation and development, called into operation only by increase in safe-keeping deposits, could be implemented only slowly and once started not readily cut off. The reviewer was impressed along these lines when viewing Missouri Valley projects in August, 1948.

The authors have no faith in the use of advance forecasts to guide in timing public projects. It must be concluded that the probable outcome would be slowly developing public works to offset recession. Certainly if recession got under way, the incentive tax would merely drive excess funds into safe-keeping deposits.

The reviewer can but admire the authors for attempting to set up a type of control which would avoid dependence on the government and the enthusiasm with which the proposals are presented. No one can quarrel about the importance of some modicum of stability. It is indeed unfortunate, however, that the work of others was largely ignored. Particularly helpful would have been a study of Ruth Mack's savings tax, Arthur Dahlberg's deposits tax, and C. W. Hazelett's incentive tax. The failure to consult such studies possibly may be accounted for by disdain for the work of professional economists.

In spite of mistakes which economists have made, if the authors had known more about economic thought they might have saved themselves such difficulties as necessarily arise from assuming that prices are merely the result of adding up costs and a profit margin. The difficulty is particularly evident in analysis of the effect of depreciation. They say that accounting, greatly expanded by the income tax, has resulted in higher prices to allow for depreciation. This they believe is an important part of our present difficulty.

ELMER CLARK BRATT

Lehigh University

Money and Banking; Short-Term Credit; Consumer Finance

A History of Savings Banks. By H. OLIVER HORNE. (London: Oxford Univ. Press. 1947. Pp. xii, 407. \$5.00.)¹

The primary purpose of this volume is to present the history of the trustee savings banks of the British Isles. In developing this narrative the author sketches the history of other types of savings institutions and of the thrift movement. The origin and development of savings banks were contemporaneous with and influenced by the profound social changes which occurred in the late 18th and early 19th centuries. Savings banks were organized primarily to promote thrift among the poor and, prior to 1810, were usually started and supported by the charitable rich. In 1810 a savings bank incorporating mutual principles was established in Scotland. Within a few years numerous mutual savings banks were in operation in the British Isles and in other countries, including the United States.

In the British Isles, especially in England, there soon developed a demand to place these banks under state control. The first such law was passed in 1817. Subsequently, at least twelve comprehensive and several supplementary statutes were enacted. As a result of these laws the trustee savings banks (except for some in Scotland), although independent of the state, have become auxiliaries to it. The services rendered by these banks may be grouped in four categories, three of which are departmentalized.

The Ordinary Department was created by law in 1817 and is found in all trustee savings banks. In terms of balances due depositors, it has always been the most important and, in recent years, these balances have approximated 65 per cent of the total. The deposits are forwarded by the banks to the National Debt Commissioners, who are required to invest them in government securities. The banks are merely conduits! The government guarantees the return of the moneys transmitted to it together with interest at a fixed rate. Since 1888, the rate of interest paid the banks has been 2.75 per cent; to the depositors, 2.50 per cent. The difference is used by the banks to pay their expenses, which are carefully controlled by the Commissioners, and to build reserves.

Deficits and surpluses of this department are absorbed by the government. From 1817 to 1948 deficits were incurred in 85 years, all before 1909; surpluses, in 46 years. The deficits resulted primarily from the government policy, influenced by the savings banks, of paying higher rates of interest than investment returns justified in order to promote thrift. Over the entire period, however, the surplus has been many times greater than the deficit. The author questions the soundness of a policy which enables the government to profit on savings of the poor and presents arguments in favor of a higher fixed rate. No analysis, however, is made of interest computation on other bases; e.g., on basis of investment returns.

The Special Investment Department was created by law in 1828; was not used until 1847; and is currently limited, by a law passed in 1904 to the

¹ Published posthumously.

larger banks. In recent years the balances due depositors of this department have approximated 25 per cent of the total. The deposits are invested by the banks in tax supported securities of local governments; in direct and government guaranteed securities; and, since 1934, in certain corporate securities. There is no government guarantee to repay the deposits or the interest thereon. To the depositors, the advantages of this department are a higher rate of interest and the avoidance of the deposit limitation (£2,000) prescribed for the ordinary department. The activities of this department are subject to "almost unfettered" state control. Pursuant to law the National Debt Commissioners, for example, select the securities eligible for investment, give prior approval on all purchases and sales of securities, control expenses, and approve the interest rate.

The Stock Department was created by law in 1880. Through this department the banks perform the services of security brokerage firms; they, however, deal only in government securities. In recent years the balances due depositors of this department have approximated 10 per cent of the total. Through the Service Department persons may, for example, purchase government annuities and insurance, receive financial advice, and purchase railroad tickets.

Many American writers have stated that the trustee (mutual) savings bank system of the United States and the trustee savings bank system of the British Isles are similar. Except for management by trustees, the two systems have very little in common. In the United States the trustees of the mutual savings banks have wide discretionary powers of management. The laws of the various states broadly outline the types of investment which the banks may make and give the trustees great latitude in making the investments. Dividend rates are fixed on a basis of earnings and are neither guaranteed nor determined in advance. Annual losses or profits are divided ratably among depositors and are not absorbed by the government. There is no government guarantee to repay deposits—except as provided for under the federal insurance (voluntary for mutuals) and the state (Connecticut, Massachusetts and New Hampshire) guaranty plans, to which the banks must contribute.

The post office savings bank system of the British Isles was established in 1861. The immediate reasons for the creation of a government owned and operated savings bank system were the weaknesses of the trustee savings bank system. At the present time the two systems are identical in all major respects except that the postal savings system does not operate the Special Investment Department. In terms of the number of accounts (approximately 20 millions) and amounts on deposit (approximately £2 billions), the postal savings system is the most important savings bank system in the British Isles. Joint stock banks began to accept savings deposits about 1904 and have become serious competitors of the trustee and post office savings bank. During World War I, the city of Birmingham started a municipal savings bank which was reorganized in 1919 and is quite successful. The author also discusses the savings banks established for the very poor; for school children; and for persons in the merchant marine, army and navy.

The savings banks of the British Isles played contrasting roles in financing

the two World Wars. They were unimportant in World War I because the government borrowed funds at interest rates ranging from 4 to 6 per cent through the sale of small denomination bonds. Although the funds of the savings banks were also used to finance the war, the government refused to increase the 2.5 per cent interest rate paid the depositors. Between the wars interest rates declined and during World War II the government was able to borrow funds at approximately 3 per cent. Although the rate of interest paid savings bank depositors remained at 2.5 per cent, the difference was not great and the ability to withdraw on demand was an advantage. Under these conditions, the trustee and post office savings bank systems contributed approximately 50 per cent (£1.400 millions) of the "small savings" used in financing World War II.

Over one-half of the text deals with the period prior to 1866. Since there are at least two excellent histories on savings banks of the British Isles covering this period,² the author might have placed greater emphasis on the period since 1866. There is no analysis of the part, if any, played by public or private borrowers in the origin and development of savings banks. The volume contains materials which are not germane to the main theme. A case in point is Chapter XI which is devoted to the proposal, advanced between 1850 and 1870, that ownership of a savings account be made a suffrage qualification. While the discussion is interesting, a paragraph would have been sufficient, especially since the proposal did not become law. The author draws from many sources but does not give the dates or pages of the citations. The index is poor; the bibliography excellent. Taken as a whole, the volume is extremely worth while and is recommended reading, especially to students of finance and history.

DONALD SHAM

Washington, D. C.

Recent Banking Developments. By SAROJ KUMAR BASU. 2nd ed. (Calcutta: The Book Exchange. 1947. Pp. ix, 382. Rs. 12/8.)

The first edition of this book, by a University lecturer in economics at Calcutta, was published in 1946. The second section "has been thoroughly revised and brought up to date," and a new section of over fifty pages on Post-War Machinery For International Monetary Co-operation has been added. The book is a world-wide survey of the main trends in banking, and in particular central banking, since 1929, with special emphasis on the Indian situation. The author's comment (p. iv) on the "entire non-existence of relevant statistics" in India that "are readily available for other countries" would support the general impression among American economists that economic statistics for most of the Middle Eastern countries are very limited.

FRANK WHITSON FETTER

Northwestern University

² Arthur Scratchley, *A Practical Treatise on Savings Banks* (London, Longman, Green, Longman & Roberts, 1860), pp. liii, 324; and William Lewins, *A History of Banks for Savings* (London, Sampson Low, Son & Marston, 1866), pp. xvi, 445.

Business Finance; Investments and Security Markets; Insurance

Business Organization and Finance. By HOMER V. CHERRINGTON. (New York: Ronald Press. 1948. Pp. vii, 485. \$4.50.)

In the words of the author, this volume "is addressed to college students. It is intended to serve as a basic text in business organization and finance." It should therefore be appraised from the viewpoint of its adequacy and suitability for college classroom use.

In the opinion of this reviewer, Professor Cherrington has produced an excellent text. The book covers the subject adequately; it is exceptionally well organized; and it is simply and clearly written. Twelve types of business organization are discussed, ranging from individual proprietorships to mergers and consolidations. In addition, separate chapters are devoted to "Cooperatives" and "Government Corporations." The discussion of each type of business organization follows an unusually uniform pattern, treating in sequence the following topics: legal nature, ownership, leadership, finance, principal advantages and disadvantages. Of these topics, the treatment of "leadership" opportunities in the various types of business organization is somewhat unique. Throughout the book, public policy is stressed by brief digests of significant statutes and frequent references to important court decisions and administrative rulings. The condensation of this portion of the text material is uniformly good, the chapter on "Federal Regulation of Securities Markets" being especially well done. The treatment of controversial topics such as competitive bidding for corporate securities is fair and unbiased, both sides of the argument being presented with a minimum of indulgence in personal opinions.

The weaknesses of the book are those which would be expected to be found in any text written for use in a standard college course. So many texts have been written in the field of business organization and corporation finance that it is difficult, if not impossible, to present significant new material. The documentation throughout the book indicates clearly that Professor Cherrington has drawn heavily on his predecessors. Moreover, the very factors which render a volume excellent as a textbook—careful organization and simple diction—tend to make the book rather dull and monotonous to the non-student reader. The inclusion of up-to-date illustrative material tends to offset these inevitable disadvantages, and more such material would have enlivened the text, although it is recognized that space limitations were to be considered. A large portion of the illustrations actually presented appear in the fine print of footnotes, and too many of the cases date back to the first quarter of the century.

Nevertheless, Professor Cherrington is to be congratulated on achieving his objective. He started out to write a textbook for a standard college course and he has produced a worthy competitor in a crowded field.

JAMES C. DOLLEY

The University of Texas

Public Finance

Public Finance. By URSULA K. HICKS. (Cambridge: University Press. New York: Pitman Pub. Corp. 1947. Pp. 392. \$2.50.)

This new study of public finance should prove to be a welcome addition to the list of texts already available. Not only does it present the old things satisfactorily; but also, unlike most texts, it contains original and useful contributions. Many teachers of public finance will, I believe, find that it comes close to what they want for their students, and all of them will discover in it ideas and relationships that will stimulate their teaching and research. This volume helps to maintain the high standard set by the Cambridge Economic Handbooks, and when one recalls the others in the series—Robertson's "Money," Robinson's "Monopoly," Harrod's "International Trade," and the rest—this will be taken as high praise.

The book is analytical rather than descriptive, though in the first part—about 30 per cent of the total—the author sets out the main characteristics of the British revenue and expenditure machinery. The desirability of familiarizing the student with administrative processes is, I believe, obvious. There may, however, be some question about the advisability of including so much historical material. One wonders whether, in a volume that must be kept so short, space to consider the history of the Budget message, and of the consolidation of the Budget accounts (to name only two points covered historically) represents an optimal use of pages. Naturally, there is little about the fiscal institutions of other countries. But it is possible that the rather general remarks about American administrative machinery, introduced mainly to provide a contrast with the British, will be enough. Incidentally, is it not an error to account for the lighter over-all tax liability of the American citizen (compared to the British) as "partly due to the greater wealth of the United States, calling for lower rates of taxes to get the same per capita revenue" (p. 88)? Though greater wealth per capita in the United States would require a lower tax rate on each dollar of wealth or income to raise the same per capita revenue, it would not explain a lower rate of tax liability for each citizen (£22.2 as against £26 in the United Kingdom).

It is in the second and third parts that the author makes her real contribution. She divides her analysis into two sections; first, a consideration of the partial effects of taxes (and expenditures), and second, a consideration of the general or income effects. The analysis of the partial effects, presented in Part II, covers something of the same ground as, but goes well beyond, conventional tax incidence theory. The analysis of the general or income effects (Part III), familiar to us as fiscal policy, is now back where it belongs as a part of public finance.

The novelty and importance of this analysis of tax incidence (the theory of taxation) consists in the fact that it is concerned with a different kind of question than the one generally asked. Whereas the analyst has usually been interested in discovering who pays the tax, the landlord or the tenant, the cigarette smoker, the cigarette manufacturer, or the tobacco grower, Mrs.

Hicks asks a more purposeful set of questions; what factors influence the size of the price increase resulting from a higher tax and (more important), what are the consequences of the increased price (or reduced income) upon taxpayers who will alter their consumption patterns, and upon producers who will have to reallocate factors? Here she makes use of criteria and principles developed in the study of welfare economics—the production and utility optima, producers' and consumers' surplus, and so on. The loss of surplus for different kinds of taxes, and their distributional effects are compared. And though it seems unduly optimistic to hold that "the production and utility optima in the form just stated are capable of being brought into relation with statistical and econometric enquiries, and so are capable of becoming practical directives of policy"; at least, stating the criteria as to the choice of policy in this way ensures that the right kind of considerations will enter into policy determination.

The analysis of the use of taxation and expenditure policy as a method of ensuring a full use of resources (one of the necessary conditions for the satisfaction of the production criteria) is conventional. The effect of taxes on the propensity to consume and investment is considered. Likewise, the income-generating effect of public expenditures is taken into account. The monetary implications of a budget deficit are also considered. However, it is perhaps surprising that she devotes not much more than a third of the space given to tax incidence to these problems of maintaining income. Are these matters now so obvious that little needs to be said?

Certain lapses in exposition must be mentioned. It would be easier for the student to see the importance of the policy criteria set out if they were used explicitly in the analysis of the various taxes considered, and if their relation to effective incidence were developed in greater detail. There is an appearance (though it does not exist in reality) of a lack of integration between the material in Chapter 7 (which sets out the criteria to be used) and the rest of the book, which could have been avoided. Also, though the style is acceptable, it is not as clear as it might be. Nevertheless, the author has made an important contribution, and many will derive profit from studying it.

LORIE TARSHIS

Stanford University

National Debt Series. By Committee on Public Debt Policy. (New York: Committee on Public Debt Policy. 1946-48. Nos. 1-7.)

The seven reports of this series, published over a period of two years, are sponsored by a committee of economists, and bank, insurance and manufacturing officials. The chairman of the committee is W. Randolph Burgess and the director of research is Professor James J. O'Leary. The reports cover the history of American war debts (No. 1), and the debt in relation to the banks (No. 2), insurance companies (No. 6), interest rates (No. 3), the budget (No. 4), and savings (No. 5). The final report (No. 7) summarizes the earlier studies and their recommendations.

The series does not offer new material in this field. It is designed, rather, to present a point of view. The stated aim of the studies is to assist in deter-

mining that policy of debt management which "will be the best for the welfare of our people and the strength and financial stability of our Government." But it is assumed—in advance of inquiry—that such a policy "must seek these ends through utilizing and encouraging the individual ambitions and creative energies of our people" (No. 1, pp. iii-iv). This is, perhaps, not a serious limitation on inquiry, but it would have been more convincing if it had appeared as a conclusion rather than a premise.

Those seeking further light on the problems of debt management will not find it here. The final recommendations are to reduce government expenditures, to reduce the debt, to transfer debt holdings from banks to other investors, to permit flexible (*i.e.*, higher) interest rates, and to reduce taxes. These points are clear, but too general to serve as a guide since rising interest rates increase government costs, and reduced taxes decrease the possibility of debt reduction. Any practical program of debt management must give some clue as to priorities or indicate the desirable proportions in which these conflicting measures should be realized. The authors of individual reports sometimes indicate preferences, but there is no complete agreement among them, and the final report makes no clear-cut choice.

Probably no one would quarrel with the desirability of transferring debt holdings from the banks to other investors, but this is to be achieved, apparently, by offering the other investors higher interest rates. No estimate is given as to how high interest rates might have to rise to attain this end, nor as to what proportion of the public debt must be refunded at these higher rates in the next few years. Yet these are important factors in determining government expenditures. Interest on the debt, even at 2 per cent, is a substantial item in current budgets. Nor is there any clear guide to the appropriate rate of debt reduction. In the fourth report, it is suggested that \$30 to \$40 billions might be paid off in the next decade, and the author gives moderate debt reduction priority over tax reduction. However, the final report makes no such choice. Apparently government expenditures, other than interest, are to be reduced enough to provide for tax reduction, debt reduction, and higher interest rates as well.

The series is, in the judgment of the reviewer, open to criticism on another count: the failure to state clearly the assumptions underlying the recommendations. In none of the reports can there be found any real discussion of the relation of the government budget to the national income. In view of present controversies in this field, any study of the national debt that does not state specifically the principles on which its conclusions are based will have limited value. Only the fifth report, on the national debt and savings, gives much consideration to this problem. This report stresses the importance of encouraging savings, apparently on the assumption (never specifically stated) that investment is limited by the amount of savings individuals and corporations decide to make. Moreover, it appears to credit improved standards of living in the past solely to saving. No mention is made either of capital-saving inventions, or of attempts to save that have failed to be translated into new investment. Our fiscal and monetary policy is indicted on the charge of having checked savings. But there is no convincing proof. (See,

especially, No. 5.) It is implied that a reduction in government spending would check inflation without reducing business activity and that a reduction in taxes would increase business activity. All this is possible, but the qualifications that might make this position tenable are lacking.

There is still much to be learned with respect to national debt management. Guidance is badly needed. It is all the more to be regretted, therefore, that the money and talent invested in this series of reports were not used to explore practices in other countries, our own past experience, some of the recent theoretical developments, or in other ways to increase knowledge in this field.

MABEL NEWCOMER

Vassar College

International Economics

The West at Bay. By BARBARA WARD. (New York: W. W. Norton & Co. 1948. Pp. viii, 288. \$3.50.)

The West at Bay is a tract for the times—an eloquent, persuasive, and often inspiring brief in support of closer association among the nations of Western Europe. It is Miss Ward's essential thesis that the nineteenth century political and economic order has vanished, that Western Europe's international economic crisis is not merely a passing consequence of World War II but rather the war-accelerated resultant of a far older and more deep-seated trend, and that lasting economic recovery and preservation of Western Europe as a continuing fountainhead of the cultural values of western civilization can be obtained only through far-reaching political and economic integration.

After introducing her argument in summary form, Miss Ward reviews in two sections of the book the political, social, and economic elements in the gradual decline of Western Europe's position in world affairs and the corresponding rise of the United States. She then sketches the immediate background of the inception of the European Recovery Program, stressing the relation to closer western association and the failure of the projections made in the fall of 1947, either by the Committee for European Economic Cooperation or by the U. S. government, to show a balance in Europe's dollar accounts by the close of the four-year period.

It may be noted parenthetically that Miss Ward pays far more serious attention to the official American long-range projections than would the authors of those estimates. She also appears to confuse the deficit in 1951-52, when the program would, according to the original plan, be in its final year, with the possible situation thereafter. Her essential point, however, namely the formidable difficulty in foreseeing a dollar balance by 1952 without either a drastic shift in the terms of trade in Europe's favor, a considerable and perhaps politically intolerable reduction in European consumption, or a far larger flow of private investment funds than appears likely, seems to be borne out by the preliminary survey of the ERP countries' four-year programs undertaken at the end of 1948 by the Organization for European Economic Cooperation in Paris.

In the concluding section of the book, entitled "Western Association,"

which occupies about one-third of the whole, Miss Ward sets forth her plea for closer association and a series of specific proposals for immediate steps on the economic side.

The book reflects those literary and intellectual qualities which were to be expected from its authorship by the young and brilliant foreign affairs editor of the London *Economist*. If not pretending to profound scholarship, the work represents informed journalism at its very best. It is well written. It evinces an excellent historical sense. Miss Ward deals competently with economic issues, although the book is not directed primarily at economists and the professional reader will find some of the exposition (notably the summary of Keynesian trade cycle analysis) oversimplified beyond recognition. Above all, Miss Ward displays a profound understanding of and abiding faith in the fundamental cultural, human, and moral values developed by the liberal and humane tradition of Western European civilization and a recognition that without genuine recovery in Western Europe its vitality as a continuing source of cultural development may well be stifled.

The most striking feature of *The West at Bay* is its attempt to come to grips on a step-by-step basis with the process of achieving closer Western European association, especially on the economic side. The discussion is introduced by a brief chapter on regional defense, which is essentially an advocacy of the type of arrangements now being created under the Brussels agreements. On the political side, Miss Ward decries constitution-writing at the present stage as mere blueprinting of "Never-Never Land," although she fully recognizes the indissoluble linkage of economic with political factors. She endorses as a first political step a regularized conference of Western European prime ministers, using the Brussels defense organization and the Organization for European Economic Cooperation as a permanent secretariat, leaving for the future more ambitious experiments in federation. In her own words (p. 196), she is "primarily concerned with the concrete questions of strategic and economic cooperation, not because they are substitutes for political decision, but because they are the difficult tests by which the genuineness of the nations' political will is to be judged."

Miss Ward's program for Western European economic association comprises four elements: (a) OEEC allocation of basic materials and equipment on criteria of optimum region-wide use, to be followed by federation of the coal, petroleum, steel, transportation, and power industries into international public corporations, paralleled by an international agricultural planning agency; (b) development of an international capital planning board to guide (and perhaps control) the rate and direction of capital expenditures both in the internationalized industries and in major private industries; (c) gradual movement toward reduction of barriers to intra-European trade and migration, with special emphasis on what amounts to a regional currency union; and (d) a concerted region-wide attack on the dollar shortage, including a planned sharing of austerity in dollar imports, joint development of non-dollar sources for food and raw materials, and a concerted sales effort for exports to the dollar area.

It should be said at once that Miss Ward's program raises at least as many questions as it answers. It is simply taken for granted, for example, that

rationalization of basic industries under coordinated international control would achieve real economies. There is no reference to possible diseconomies of large-scale administration by an international bureaucracy. Perhaps there are sound *a priori* grounds for believing that international horizontal integration may afford greater economies than horizontal integration within national boundaries, since competitive nationalist development of basic industries in small countries clearly entails serious economic disadvantages. On the other hand, as Miss Ward herself recognizes, the very pressures of economic nationalism are the most formidable obstacles to achievement of such a program. Nor does the supporting evidence of the postwar European international allocating agencies appear genuinely relevant. The European coal, transport, and associated organizations now combined into the Economic Commission for Europe were engaged primarily in avoiding excessive distortions in the distribution patterns of acutely scarce materials in the immediate postwar years, and have barely scratched the surface of region-wide rationalization. Again, Miss Ward omits anything more than casual reference to problems of inflation, exchange rates, and discrimination against dollar imports—matters essential to a comprehensive discussion of the broad issues raised by the book as a whole.

Indeed, the reader is left with a puzzled sense that, while Miss Ward has put forward Western Europe's apparent inability otherwise to achieve international viability at a tolerable living standard as the principal argument for closer association, she has provided little evidence that her specific program would make a major contribution to international economic balance. It is no doubt probable that it would help. In any event, the strategic and political advantages of strengthening Western Europe through closer association are so clear-cut that Europeans would be well persuaded to develop closer economic cooperation, if only as an act of faith. Miss Ward's greatest contribution, however, lies in asking many of the right questions and in making an all too rare attack on the central operational problems of precisely where and how to start effecting a lasting solution to the strategic, political, and economic issues which beset Western Europe. She has placed the economic problem in its proper perspective in relation to political and moral factors. It is with this perspective and in response to these questions that the further spade work of finding constructive answers must be pursued, both by Europeans and by Americans in their role as participants, providers of aid, and in the long-run beneficiaries of the European effort to preserve the western heritage.

LINCOLN GORDON

Harvard University

A Second Review of *The West at Bay*.

Said Mr. Wrigley to Mr. Ford

"Chew more of my gum or, on my Ward,

I never can buy another Lincoln;

My balance with you is persistently sinkin'".

Said Mr. Ford to Mr. Wrigley

"You're cuckoo, my boy, not to say higgly-piggly,

Our reciprocal sales may be far from mates,

But the rest of the world still masticates!"

Anon.

These quatrains are cited more in desperation than in mirth. I am in complete sympathy with Miss Ward's general ideals and have no doubt that she merits many of the encomiums showered on her by her publishers and somewhat naïve reviewers. But if it is true, as the jacket of this book quotes John Fischer as saying, that Miss Ward is "probably the most brilliant writer on economics . . . in all of Europe," then the West is not only at bay but practically certain of irrevocable *Niedergang*.

The book professes to demonstrate the urgent need of a centrally planned (but, of course, not "authoritarian") economy for Western Europe as a means not only of combatting the centrally planned (and, to its protagonists, profoundly "democratic") economy and politics of Europe's eastern sector, but also of competing with the overweening American Colossus. Miss Ward is deeply concerned about "balance," and, among other errors, thoroughly confuses the balance of power with the balance of payments. Despite her disesteem of Russia, she swallows whole, and regurgitates, the Soviet doctrine that the American policy of liberalization of international trade would be fatal to countries with "weaker" industries than those of the United States, and, while professing the contrary, she is obsessed with the philosophy of bilateralism.

The jacket states that Miss Ward took first class honors in economics at Oxford University, and presumably, therefore, has heard of the doctrine of comparative advantage. There is, however, not the slightest evidence that she knows what it means. She is therefore unaware that *per capita* productivity (or national poverty) has nothing whatever to do with *balance* in international trade (unless, indeed, it should be alleged that unalleviated poverty would *ensure* it), or with national competitive capacity. She even convicts herself out of her own mouth since she cites, among the long-run historical causes of Britain's present economic difficulties, the British loss of markets to Japan (where *per capita* productivity was never anything like as high as that in Miss Ward's homeland) as well as to the United States (where it has long been higher.) If Britain lost in competition with the United States because American industry was strong (in Miss Ward's sense), why did Britain also lose in competition with the Japanese where industry, by the same criterion, was weak? Miss Ward cannot be right on both counts, though it is possible, and is, in fact, the case, that in both she is, in her inferences, profoundly wrong.

Miss Ward, further, is much impressed with mere size as a factor in competitive power. This is sometimes presented as the size of the firm, and sometimes as the size of the market. It is, however, notorious that large firms, such as General Motors, are mortally afraid of the inefficiencies of great size; that, for this reason, they decentralize their operations, knowing

that only the most strenuous efforts to combat hardening of the arteries keeps the concern abreast of certain of its much smaller competitors. It may, moreover, not be out of place to call to Miss Ward's attention the principle of opportunity cost which would tend to calm her fears of size even if they were otherwise justified. For, if the United States has a comparative advantage, and specializes, in the industries where the greatest size is all-important it must, *pro tanto*, abandon those industries where the greatest size is less significant. One cannot *specialize* in the output of anything without reducing the output of other things below the level that would be necessary to meet even the reduced (total) demand under conditions of self-sufficiency. Other countries will then come in to supply this gap in demand. There are, moreover, very few industries in which the British home market could not be large enough to give any feasible economies of size.

Miss Ward labors *ad nauseam* the point of the long-run shift of political power from western Europe to other parts of the world, and seems to think that this is highly important economically. Yet similar shifts of political power have been in process since the beginning of time without corresponding economic consequences. Sweden, Denmark, Holland, and Switzerland have, to take a modern instance, been losing in relative political might much longer than western Europe as a whole, but have, nevertheless, rather steadily improved their economic status. The United States itself, moreover, did quite well economically when its international political power was small (relatively better, in fact, than after it had become a major political power.)

Miss Ward is further convinced that western Europe cannot function satisfactorily except as an economic unit. If this were true, the obvious recourse would be to intra-west-European free trade. But Miss Ward dismisses all this as of less than nugatory value. Since such free trade would surely result in a great deal more complete economic integration than would any other conceivable policy, its practically unconsidered rejection means that Miss Ward will have west-European economic integration only on her own terms, *i.e.*, "planned" under the British aegis, or, at least, with a very lively regard for specific British interests. She wants *national* planning *within* a European union. This is surely a prescription for conflict or for chaos.

The "dollar crisis," discussed in the Introduction, is now (and, perhaps, always was) solely a matter of discrepancy between the controlled external (exchange) value of the pound sterling, and other European currencies, and their (lower) internal values. For reasons which it is impossible here to detail this is leading not only to the "dollar shortage" but to a monstrous distortion of trade. Miss Ward presumes to lecture Americans on their economic illiteracy and suggests (truly) that it will be very difficult to make the American cotton or tobacco grower understand why the dollars he has voted in Marshall plan aid should be spent on non-American tobacco or cotton at higher prices than those at which he himself is eager to supply at least equally good products. It is, of course, all but certain that I share what Miss Ward conceives to be the general economic illiteracy of my compatriots, but I submit that it would be difficult to make *any* intelligent person under-

stand why such a thing should be done, and I would say that, if Miss Ward thinks she knows the reason, she had better look to her own economic education than to that of the American people at large.

The truth is that there may be a case for paying apparently high prices in *sham-money*, valued against real money at factitious rates of exchange, than for paying the same, or somewhat lower, prices for the same goods in any real money (dollars or other "hard" currencies). The difference between the two ostensible monies is that the sham-money is useful only in the purchase of goods with which the supplier of the money wishes to dispense, while the real money (as *must* be the case if it is to be real) may, at the will of the possessor, be used to buy anything at all. The sham-money is, of course, not worth in real money what the authorities declare it to be worth, and even the illiterate American cotton or tobacco grower might understand that it might be worth while to offer to a seller of goods a somewhat larger amount of this stage money than to pay him an equivalent face value of dollars, or any other real, even if far from ideal, currency. But his (doubtless naïve) reaction might be to ask why governments should insist on putting a sham exchange value on their monetary issues and thus make internationally quoted prices a hopelessly inept, when they could be an all but perfect, allocator of resources. (Nor is the answer to this query quite what Miss Ward might think it to be.)

Miss Ward's "economics," in short, is in the tradition of Hjalmar Schacht, Thomas Balogh, and the bullionists. This may, perhaps, be the (resurgent) wave of the future, but it has not yet established its position in a still partly rational world, and some of us, in the United States at least, are still so conservatively unregenerate as not to have lost all faith in hardheaded rationality. We would prescribe for Miss Ward another journey to Pieria and a good long draft of its waters.

This review is consciously harsh. There are many nice things that might be said about Miss Ward though it would, in this respect, be extraordinarily difficult to compete with the publisher's blurbs. It must be said, however, that she writes most engagingly, that her heart is in the right place, and that, when she does not get beyond her depth, she swims very prettily indeed. She is all too plausible. I am led to blunt speaking, however, by the conviction that these qualities are doing all but irreparable damage to the cause of freedom, for which Miss Ward, I am sure, feels a warm affection. She builds a structure which, completed, she would abhor; and, though written in all innocence, this is, to a libertarian, a subtly dangerous and a highly subversive book.

FRANK D. GRAHAM

Princeton University

The Economic Reconstruction of Europe. By GEOFFREY CROWTHER. Foreword by Homer D. Crotty. (Claremont, Calif.: Claremont College. 1948. Pp. xii, 79. \$2.75.)

In this volume, the associated colleges at Claremont, California, have made

available the text of three lectures delivered under their auspices at the end of February, 1948, by Geoffrey Crowther, editor of the London *Economist*, under the respective titles, "The Vitality of Europe," "Freedom and Order in Europe," and "America and Europe." The lectures are pitched at the level of the intelligent but not overly informed layman, and make no pretense at professional economic analysis of the issues. They are in part outdated by subsequent events. But they repay reading by virtue of that beautifully lucid style which graces the pages of the *Economist* under Mr. Crowther's editorial supervision, and the many provocative reflections which often make one eager for further development of the author's views.

The essence of the first two lectures is summarized by the author himself in seven points (pp. 61-64), which may be briefly paraphrased: (1) In comparison with the time required for recovery after other wars, the continued existence of major economic dislocations in Europe is neither surprising nor particularly significant; (2) The war-induced changes in Europe's economic position are mostly temporary, the permanent ones (notably liquidation of overseas investments) being comparatively unimportant; (3) The chief sources of Europe's present economic troubles may be eliminated fairly promptly, especially through a major reversal of the terms of trade in favor of Europe as an industrial exporter; (4) The East-West division of Europe, while of enormous political importance, is not of great economic significance; (5) Germany is a major exception to point 4 and is Europe's most difficult economic problem, which can be satisfactorily resolved only through economic reconstruction and political integration within a larger European association; (6) The socialist trend in European economic policy is not as extensive or as doctrinaire as is commonly thought in the United States, is largely a response to limitations of the European environment, and will not greatly affect the prospects for successful European reconstruction; and (7) Western European federation is neither a prerequisite to economic recovery nor particularly desirable from a merely economic viewpoint, but is highly desirable politically and should be promoted by the United States under the opportunity afforded by the European Recovery Program. In his third lecture, Mr. Crowther warns against unduly restrictive conditions on American aid under the European Recovery Program and finally, looking to the longer-term picture, calls for continuing American leadership in a community of nations spanning the Atlantic Ocean.

From the lectures as a whole, two points of major interest stand out. The first is Mr. Crowther's striking optimism as to the comparative ease (except for Germany) of obtaining a balance in Europe's international accounts and his expectation that the British problem will be solved largely through a restoration of more favorable terms of trade with primary-producing countries. Mr. Crowther appears to assume that 1938 is an adequate standard for judging the problem of European recovery. This view contrasts sharply with Barbara Ward's conclusion (*The West at Bay*, 1948) that the postwar dislocations are a magnification and acceleration of a serious relative decline in the Western European economy which began well before the first World War. In this reviewer's judgment, Miss Ward rests on sounder ground. In view of the increasing economic self-consciousness of the primary-producing coun-

tries, it is difficult to believe that terms of trade such as those of the mid-thirties will recur and be maintained over considerable periods of time. The British have accomplished wonders in reducing their dollar deficit from \$2.7 billion in 1947 to a prospective \$1.3 billion in 1948-49, but these gains have been made in a seller's market for industrial goods and in the total absence of German competition. It is difficult to see how any prospective improvement in the terms of trade can remove more than one-third to one-half of the remaining deficit. In any event, the March, 1948, Report of the Economic Commission for Europe suggests that for Western Europe as a whole, in contrast with Britain, the terms of trade have not substantially deteriorated in relation to prewar. International economic viability at tolerable living standards for the entire area would appear to necessitate substantial structural modifications in the western European economy to achieve reduced dependence on imports and increased productivity. At least some of these changes would be greatly fostered by closer economic integration.

On the political side, Mr. Crowther's lectures remain particularly timely. Although less insistently than Miss Ward, and with far less emphasis on economic measures, he also calls for closer western European union, particularly of the five Brussels powers and possibly Denmark and Norway. He would begin with the pooling of military forces, both for its own sake and on the ground that without pooled defense, planned economic specialization is unacceptable. He suggests, for example, that lack of military integration would prevent the British from accepting a French monopoly of watch and clock making (precision instruments in wartime) and would prevent the French from accepting a British monopoly of tractors (tanks in wartime). One may doubt the force of this particular argument, since even within a militarily and politically united Europe the geographically less vulnerable areas would have a strong claim for the location of all strategic industries. Would not Portugal, Eire, Iceland, and Norway be the real beneficiaries of such a policy?

Granting the priority of military union, one is also tantalized by the need for more specific delineation of the remaining possible successive stages toward political and economic integration. The technique of military pooling is a relatively simple matter. The great gap in today's thinking lies between this vitally important but conceptually simple stage and the starry constitution writing of the World Federalists, Union Nowers, and Atlantic Community makers. Mr. Crowther in the instant volume just begins to shed light on this matter. It is devoutly to be hoped that it may soon be further illuminated by his almost unique combination of political and economic wisdom on western European affairs.

LINCOLN GORDON

Harvard University

The European Recovery Program. By SEYMOUR E. HARRIS. (Cambridge: Harvard University Press. 1948. Pp. xvii, 309. \$4.50.)

"The object of this book," Professor Harris writes, "is not only to explain

the ERP and the major issues involved; but also to offer some points for consideration when the legislation is again reviewed early in 1949 and later years."

The organization of the book is designed to meet the requirements of the hasty reader. The first twenty pages contain brief statements about the major issues raised by the European Recovery Program and present summary conclusions. Part One, about sixty pages, is given over to an elaboration of the major issues and the rest of the book is largely concerned with the basic data and related estimates and explanatory materials which were submitted to the Congress during the first quarter of 1948. The points which Professor Harris offers "for consideration when the legislation is again reviewed" are interspersed throughout the text and are not always clearly definable.

Professor Harris isolates about eight major issues involved in the formulation and administration of the Program. He believes that the outcome of these issues will largely determine the extent to which the European participating countries by the end of 1952 will be able to support themselves at high levels of economic activity and at tolerable standards of living. On almost every one of these problems the author comes to definite conclusions which are presented in the earlier sections of the book, designed for reading by busy officials and executives. Discussion and qualification appear in the sections which the "general reader and student unhurried" might read (p. x).

Three of the problems which Professor Harris believes will influence the success of the Program relate directly to domestic economic policies. In his opinion, the United States has thus far failed to adopt the necessary controls on inflation. Furthermore, Professor Harris fears that the Program might degenerate into a subsidy system for American producers. He also questions the desirability, in view of the alleged costs involved, of using ERP to support private American enterprise. The author asserts that utilization of private channels of trade for procurement of goods financed by the Economic Cooperation Administration "may cost the taxpayer billions of dollars" (p. 15). Although he recommends centralized government procurement "of all supplies required under the ERP," Professor Harris does not explain how such an agency could effect economies in the purchase of thousands of commodities and he fails to consider the effects of such a policy on the future of private enterprise in international markets.

The author observes that the extent of communist opposition will affect both the outcome of the Program and the amount of supplementary military aid which might be provided to certain countries. With respect to the non-communist countries which are not participating directly in the ERP, Professor Harris believes that the Executive Branch arbitrarily reduced the estimated cost of the Program to the United States Treasury by placing excessive burdens on the other countries in the Western Hemisphere. He states that these countries "are being asked to provide goods under the ERP in exchange for credits or dollars; and the use of these dollars is to be subject to control by the United States" (p. 16). This judgment does not deter Professor Harris from urging the adoption of an effective system of export

commodity controls which would divert United States exports to Europe "at the expense of other areas" (pp. 198-201).

The author notes that United States assistance is extended on condition that "approved" policies are carried out by the participating countries. Professor Harris believes that United States authorities are pursuing erroneous policies in certain important areas. For example, United States executive branch officials are making "strong statements" in favor of foreign exchange rate devaluations. At the same time, they are dodging the issues about controls of resources and even of wages and prices in Europe since a stand on those matters might provoke embarrassing controversy about U. S. domestic policies. On the question of exchange rate devaluation, Professor Harris seems to me to be attacking a windmill of his own making. A careful examination of the Congressional hearings did not yield statements which would support his charge. The author refers to, but does not cite in his references, certain statements made by the National Advisory Council on International Monetary and Financial Problems. I believe I have located the proper document and the strongest statement found therein is mild indeed, even when quoted out of context. "The Council . . . believes that some adjustments in exchange rates (of member countries of the International Monetary Fund) may have to be made in the near future." The next sentence in the text adds significant qualifications. "Any action in Europe must, however, be related to the provision of American assistance under the European recovery program and in all instances must also be related to the steps taken toward the internal stabilization of the economic and financial situations of the member countries."¹

The author believes that the Executive Branch pressed too hard for deflation of investment programs of the European countries and therefore the cost to the American taxpayer for the "next ten to twenty years" might be substantially greater than present estimates. Furthermore, other considerations lead the author to doubt that the European countries will become independent of extraordinary outside assistance by the end of 1952. "Even if the desired rise of output is achieved, however, there will remain serious obstacles to wiping out the major part of the deficit in the balance of payments, and in particular with the United States. Here is the most perplexing problem of all, and it may well not be substantially solved in four or five years, even if the ERP is favored by rising productivity and output and correct fiscal and monetary policies" (p. 25). As an adherent to the thesis that persistent dollar shortages will continue in world trade, Professor Harris is almost forced to take a dim view of the prospects for recovery in Europe. Since the thesis of dollar shortages tends to discourage strong efforts on the part of countries to increase exports, particularly exports to the hard currency areas, it is difficult to accept this view and also the author's belief that an enlarged investment program in the European countries would contribute materially to a solution of their dollar-deficit problem.

¹ *First Special Report of the National Advisory Council on the Operations and Policies of the International Monetary Fund and the International Bank for Reconstruction and Development*, 80th Congress, 2nd Sess., H. D. No. 656 (May 18, 1948), p. 12.

The controversial nature of the author's conclusions on many issues raised by the European Recovery Program should not obscure the fact that Professor Harris has highlighted some of the basic problems involved in this vast undertaking and that he has presented to students of the subject the relevant factual materials from which independent conclusions can be derived.

W. H. BRAY

Washington, D.C.

Business Administration

Advertising and Economic Theory. By E. A. LEVER. (London, New York, and Toronto: Oxford Univ. Press. 1947. Pp. xi, 132. \$2.75.)

This tiny book (it would cover only 65 pages like this one) was written, its preface explains, "primarily to invite young economists to think out the proper place of advertising in economics and to emphasize the necessity for a theory of consumption," and secondarily "to suggest a method of bridging [the] gap as far as advertising is concerned" between "practical men of affairs, [who] appear generally to think that economic theory is intellectually inaccessible," and "theoretical economists, [who] are often severe in their strictures on what appears to them to be the naïve and amateurish language of the practical men."

The main argument of the book is summarized in the final chapter as follows: "The marketing of consumption goods is subject largely to conditions which are variously called imperfect, monopolistic or non-price competition. . . . Advertising provides a tool which gives prospects of profitable consumer demand. There is probably little or no restriction of outputs to maximize profits, as is asserted in the theory of pure monopoly; indeed, within wide limits, producers generally wish to increase their outputs up to their respective optima or, in ignorance, often beyond these optima. Costs are incurred in this attempted growth and frequently a substantial part of advertising costs can be looked upon as growth costs." The following points are listed as tentative conclusions "which must be taken care of in a realistic economic theory": (1) "A manufacturer of consumption goods cannot obtain the benefits of mass production without using advertising. Low—or lower—prices are less frequently a sufficient inducement to buyers than is assumed in the elementary economic theory of supply and demand." (2) Advertising produces utility by creating wants which are then satisfied. (3) Advertising can, under some circumstances, result in gains of efficiency sufficient to offset its own costs; and while it may sometimes cause waste, such waste is a consequence not of advertising but of freedom of consumer choice. (4) "The distinction . . . between 'informative' and 'combative' advertising is not realistic. In any case, . . . the greater proportion was informative." (5) "Advertising tended to be correlated with production rather than *vice versa*." (6) "Advertising can be a form of Investment, in Lord Keynes' use of the term."

Needless to say, not all of these conclusions can be fully substantiated in

a book of this size. A good many propositions, especially those relating to economic theory, are supported only by quotation marks and references to recognized authorities, most frequently Borden, Chamberlin, and Robinson. Indeed, Lever is, on the whole, surprisingly uncritical of both economic theory and advertising.

If the book has a particular merit, it is that it touches a good many of the economic issues that have been raised concerning advertising, mentions the principal literature, and presents some institutional and statistical data on advertising. Thus, it may prove, as the author intended, of some value to a "young economist" someday mapping a more thorough and penetrating investigation of the role of advertising in the economy. Such an investigation should, for one thing, examine existing theories of imperfect and monopolistic competition with regard to the consistency of their conclusions with actual advertising practices—with regard, that is, to the ability of these theories to organize, predict, or rationalize observed advertising practices.

W. ALLEN WALLIS

University of Chicago

Industrial Organization and Markets; Public Regulation of Business

Problems in Price Control: Pricing Techniques. By ROBERT J. BENES, REED DICKERSON, JOHN A. HART, DAVID KASS, A. MOORE LIFTER, and JOHN W. PASCHKE. (Washington: Supt. Docs. 1947. Pp. xi, 286. 55 cents.)

This volume, the eighth in the series of general publications dealing with the work of the Office of Price Administration, consists of six essays, each called a chapter. The whole is designed to give an exposition of certain price-fixing techniques used by the agency during the war period and immediately thereafter. The approach is roughly historical, beginning with the first of the general techniques used after the agency had the direct statutory authority of the Emergency Price Control Act of 1941. This was the General Maximum Price Regulation, and is described by John A. Hart in the first chapter. The following chapter, written by Reed Dickerson, deals with the freeze technique. The third chapter, by Robert J. Benes, is concerned with the techniques and difficulties of pricing by the formula method. The fourth chapter, the work of A. Moore Lifter, takes up the very complex problems presented by the necessity of pricing by specific authorization. The only definite case study involving a closely related group of commodities is presented in Chapter Five, in which David Kass goes into considerable detail as to the methods used and difficulties encountered in the pricing of solid fuels. The concluding chapter, by John W. Paschke, deals with the problem of pricing foods, and the techniques of distributor margin control.

It would, of course, be easy to criticise the organization of this volume, just as it has been easy to criticise the organization of others in the series, by pointing out that the editing leaves something to be desired. It is true that there is duplication of material, especially between the first two essays, for the second uses the subject of the first as a continuing example in its exposi-

tion of the freeze technique, thus frequently repeating what has already been said. This criticism is not so true of the material of the other chapters: in fact, for them, it can be said that instead of overlapping there is sometimes too little transition material. The development by which one method of control either grew from, or was compelled by another, is not sufficiently elucidated.

But although such criticism is easy—and correct—it would be hardly fair, in view of the avowed method and purpose of the series. From the first, with apparent full understanding of the inherent disadvantages of the method, it was planned to present the studies as a series of essays. We must, therefore, accept the plan of organization and go on to a consideration of this particular set of essays. It does not present a careful, closely reasoned study of the techniques of price control in all their aspects: it is rather an attempt to describe certain phases of the problem, and certain solutions which were used. The aforementioned careful, analytic study of the techniques of price control as practiced by the Office of Price Administration will not, I venture to say, be a book of 286 pages, as this one is; it will most likely consist of five volumes of a thousand pages each.

No one of these essays, on the other hand, is hammock reading for the dilettante. The approach is technical, and frequently a bit involved as to vocabulary. There are expositions which only the initiate can handle fluently, and sometimes he will find himself nonplussed. With all of this, too, I have no quarrel. The technique of price control was never designed for the amateur; it did not follow glittering generalities; it was difficult to originate, and far from simple to use. The Empire State Building did not rise upon generalized blue prints either. The difference is that the building of a material structure is known to be a highly technical job, and the technicians do it with little lay interference. Price control was conceived and had to be carried out in the scorching glare of Kleig lighted publicity, with much kibitzing from everyone, and no few anathemas. But the job still remained technical, and it had to be run by technicians. The amateurs frequently proposed price regulations, but they weren't price control regulations. (Read about the Yellow Draft Plan on page 238, *et seq.* of this volume.)

The essays do lack comprehensive and critical appraisal of the results of the methods dealt with, even though each one devotes a few paragraphs to that aim. This lack is the great defect of the volume. There is no definite statement about how each method failed to reach its goal—and each did fail to a greater or less degree, of that there is no doubt. No red signal flags have been set up to mark the pitfalls, so that future travellers may avoid them, and there is no over-all suggestion as to how to do a better job when next it has to be done. Perhaps we are too near in time to the facts to be able to do a good job of warning, but from the present look of things, someone would deserve well of his country were he at least to try it.

Only indirectly and with reserve is comment made about the political difficulties and congressional heckling which the men at high policy levels had constantly to undergo, all of which were a major distracting influence to the work of the agency. If Mr. Fairless had to spend as much time explaining to his Board

as, for instance, Mr. Bowles had to spend explaining to various congressional committees, there would be real reason for a steel shortage. Even now, the writers of the essays, mindful, doubtless, of past congressional browbeating are all too careful to keep from placing blame for some of the agency's failures where it belongs, namely on politics and on the Congress, the members of which always seemed to want price control, in general, but never specifically controlled prices when their pets were involved. It is my bitter feeling that a cold, implacable analysis of this official hamstringing of an essential war effort cries aloud for expression. This volume doesn't do it, although here and there a coy sentence is pregnant with meaning for those whose memory is good.

To give anything approaching a résumé of the material contained in the essays is, of course, impossible in a review of this length. A few selected facts and implications may be interesting. Before price control had run its course, more than 500 Maximum Price Regulations had been issued. Almost all of them had been amended at least once, and several of them had had hundreds of amendments. In addition, there were thousands of orders issued under the authority of some of the regulations, and tens of thousands of special adjustments. The necessary paper work was a burden and keeping abreast of the regulations a most difficult task for the field men, as well as for the business world.

Implicit in the essays is the fact that no one in America really knew, or knows, very much specifically about our economy and especially about the ways in which our "market" functions, and this ignorance is as rampant among members of an industry or trade as it is among the economists. (This book should be required reading for those teachers of economics who still lecture with debonair unconcern about the "American market," as if it were a single well-oiled, self-running machine. What a surprise they'd get!).

Since no one had the facts about the "historical" market, the agency tried to get them for itself. Frequently it called on the Bureau of Labor Statistics, which, with its trained staff, did yeoman service in making needed surveys. From such data the agency tried to arrive at some sort of rational bases for some of its controls, notably the food margin controls. Of course, statistical analyses were used, but it is noteworthy that after the curves had been carefully drawn, and divided into four types,¹ the final determination of the specific margin to be used in any particular case was still more by subjective judgment than by objective rule. In this particular field, Safeway Stores objected, citing the arbitrary method by which the agency arrived at its conclusions, but the Emergency Court of Appeals upheld the determinations, declaring in a most important decision that it was not the means of determination of price which were of primary importance, but rather, whether the price determined was "generally fair and equitable."²

Then, there were the difficulties of definition and of classification. For instance, should all stores be treated alike in the matter of food pricing,

¹ See the section titled "Analysis of Margin Data," page 229 and following.

² See page 280 for this important part of the decision.

whether or not they were large or small, single or chain?³ What is a margin? Is it figured on the cost of the article (that is the traditional method of our schools), or on the selling price (most "modern" businesses do it that way)? The agency finally came to call profit percentage based on cost a "mark-up," and one based on selling price a "margin." It was very easy to make a mistake, and a mistake could make a large difference in price. And what was an "in-line" price? Although the concept was rather widely used, no clear-cut definition was ever enunciated.

The General Maximum Price Regulation froze prices at the highest level charged in March of 1942. That's a simple statement, it would seem. But, to consider just one difficulty, what if a seller wanted to sell something in August which he hadn't sold at all in March of 1942? There had to be an answer to that one, and there was—not only one, but several. One is set forth at some length in the last paragraph on page 83. Not only this paragraph, but the one following it on page 84, are both most interesting in setting forth the difficulties inherent in saying precisely what is intended, in language understandable to the man who has to abide by the regulation. I am willing to make a modest wager that the figure derived (correctly) by the author for "average per cent mark-up," in his exposition of the simple example in the first paragraph at the top of page 84, would not be the figure derived by most of the people to whom the regulation applied. I could be wrong.

Even while I was a member of the staff of the Office of Price Administration, I used to be amazed, in my cloistral, midnight meditations, that the agency succeeded at all. A perusal of this set of essays does but increase that amazement. But the record speaks for itself: wartime price control was an over-all success.

STANLEY C. ROSS

Smith College

Problems in Price Control: Pricing Standards. Edited by JAMES B. ECKERT. (Washington: Supt. Docs. 1947. Pp. xvii, 522. \$1.00.)

Problems in Price Control: Changing Production Patterns. Edited by BENJAMIN CAPLAN. (Washington: Supt. Docs. 1947. Pp. xiii, 441. 75c.)

These two studies in the historical series covering the activities of OPA describe the development of pricing standards by OPA and its predecessor, OPACS, between 1941 and 1946 and the problems met in seeking to maintain production of necessary items under conditions of wartime price control. Each of these volumes consists of a series of chapters written by different individuals on various aspects of the problem. These chapters are of uneven performance and extremely repetitious. Although they present a picture of the issues involved, there is no critical assessment of policies pursued by OPA during World War II. They should be useful, however, to students of public control and to historians of the war effort. They should likewise be of considerable value to those who are concerned with industrial mobilization

³ They were, in fact, divided into four classes. See page 243.

planning for another war. Finally, they should be of interest to economic theorists because of the incidental sidelights which they throw upon the structure and functioning of the American economy in times of both war and peace.

Pricing Standards is concerned with the standards used in establishing and adjusting price ceilings. These standards derived from several sources: congressional legislation, executive orders of the President, the directives of the Economic Stabilization Director and the Director of War Mobilization and Reconversion, and finally the Price Administrator and operating groups within OPA itself. The volume includes a chapter on the general nature and significance of OPA price standards and a chapter on each of the basic standards developed by OPA including the industry earning standard, the minimum product standard, the reconversion and transition pricing standards, and the decontrol standards. It also includes chapters on the basic legislative standards for agricultural commodities, the Bankhead-Brown Amendment applicable to cotton, and Barkley-Taft Amendment of 1946. Finally, there are chapters on the changing character of product price adjustments and on individual seller adjustments including adjustment of abnormally low prices under the General Maximum Price Regulation.

Pricing standards of OPA were closely associated with the techniques of control used in the early period of price control. At that time OPA depended to a large extent upon the techniques of freezing base-period prices or base-period pricing formulae. Consequently, the pricing standards established by OPA were concerned not with the adequacy of prices in general but rather with the conditions under which prices became unfair and inequitable and consequently required upward adjustment.

The basic standards developed by OPA were the industry earning standard and the minimum product standard. Under the industry earning standard, prices of an industry were considered fair and equitable so long as the earnings of the industry equalled or exceeded its earning in a representative peacetime period, with due allowance for changes in investment. In general, the representative peacetime period was taken as the years 1936-1939. The minimum product standard was developed for multiple-product industries to supplement the industry earning standard as a method for determining whether the level of ceilings on particular products was fair and equitable. As finally formulated, it provided that sales prices on particular products or product lines of a multiple-product industry should be sufficiently high to allow the producers of the bulk of the output by dollar volume to receive their out-of-pocket costs.

Both of these standards were essentially relief standards in their original conception. It is not surprising that OPA faced many difficult problems in defining the concept of an industry, in determining profits, in measuring changes in net investment, in selecting a representative base period, in defining "out-of-pocket" costs, and in determining a satisfactory measure of the "bulk of the output." Supplementary standards were developed for multiple-product industries with substantial single-line members, for segments

of industry in special economic situations, and for industries whose current earnings were abnormally distributed as between individual producers. More liberal standards were developed for industries subject to reconversion or transition at the end of the war.

It is interesting to note, however, the pervasive influence of the two basic standards which in rough form were adopted early in the war and their impact on the thinking and operations throughout the price control establishment. It is equally interesting to note how slow OPA was in developing explicit meaning for these general standards. It is clear that, given the general strategy of price control, these standards were extremely useful as interim devices designed to force industry to absorb cost increases and to minimize the immediate administrative burden of price control upon OPA. In retrospect, however, it may be questioned whether the adoption of these two standards was not taken too seriously by the price controllers and whether their preoccupation with holding the price line did not divert their energies from devising standards and procedures which might have been more effective both in facilitating the necessary adjustments within the economy and mobilizing public support behind the price control program. The Bankhead-Brown Amendment, Barkley-Taft Amendment, the prohibition of highest price-line limitations, and the controversy over reconversion pricing and decontrol standards are all examples of successful attack upon OPA's basic standards resulting from pressures of interested groups and the exasperation of congressional and public opinion. OPA's principal function was to facilitate the war effort directly through facilitating necessary production and indirectly through promoting social and political stability. Holding the price line was a tactic, not an end. It is probable, however, that if the principle of a controlled price system had not been in dispute, OPA might have moved more rapidly to a solution of the pressing problems of facilitating production.

Changing Production Patterns highlights the inadequacies of the pricing standards under the conditions which prevailed during World War II. This volume is concerned with several problems faced by OPA in maintaining the production of necessary commodities. Although price control seemed to work in the early period without developing serious problems of production, with the passage of time it appeared that the price incentives were such as to induce serious shortages in some critical areas such as food and low-price items of textiles and clothing. These relative shortages developed for various reasons. In certain cases they were the result of errors in original price ceilings, for example MPR 127 covering textile converters. In other cases they were the result of increasing incomes and the shift of demand from low-price to high-price items. In still other cases they were the result of differences in the profitability of various items of production in the base period and a desire on the part of the manufacturers to take advantage of the increasing demand for high-profit items under wartime conditions. Finally, in the case of the feed-food problems the difficulty arose from the fact that the relations between parity prices, which were the statutory guides to price

control in this case, were not the appropriate relations to encourage the desired pattern of food production. Consequently, OPA was faced with a series of crises in food, textiles, clothing, consumers' durables, and building materials.

It is to these problems that *Changing Production Patterns* is devoted. The study includes a section on the relations between OPA and WPB in developing price and production controls in textiles and apparels and a section on restrictive pricing designed to affect production patterns, such as the highest price-line limitations, MPR 127 controlling the converting industry, and the maximum average price plan (MAP). It also includes a section on various incentive pricing schemes developed for textiles, clothing, and consumers' durables and a section on the feed-food price problem.

With a few exceptions, the discussion is concerned primarily with general policy problems and makes only incidental references to the structure of the industries involved and the statistical effects of the policies pursued. However, these chapters throw a good deal of light on the pricing practices of various industries in both peace and war. It is clear from reading these chapters that although the economic system is not as sensitive as has been sometimes supposed, nevertheless there is considerable flexibility in the system. Over a period of time, resources are quite mobile under conditions of high-level demand. Even under wartime controls, manufacturers and distributors made substantial shifts in the direction in which they devoted their resources as a result of shifts in demand and differences in the profitability of various lines.

In the early period OPA clearly operated on the assumption that its principal objective was to hold the price line and that if serious problems of supply developed, the solution was to invoke production directives through WPB and the Department of Agriculture rather than to attempt to manipulate the controlled price structure so as to produce desired production patterns. The principal exception made to this was in the military goods area, an extremely important area which is hardly mentioned by either of the two volumes under review. Controversy soon developed between OPA and WPB, however, over the relative place of production directives and price incentives in insuring the desired production patterns. After considerable struggle between OPA and WPB, in which the Office of Economic Stabilization (OES) and the Office of War Mobilization and Reconversion (OWMR) were referees, it became clear that WPB's contribution to these problems would be small and consequently that need for price relief was greater than OPA had hoped.

This controversy served, of course, to delay the price relief and thereby helped to preserve the integrity of the statistical price line longer than might otherwise have been the case. The supply problems which resulted, however, led to scarcities which increased the cost of living more than the BLS index indicated. Moreover, the delay in facing these problems and the controversy over the methods to be used did much to weaken the support of the price control program by industry, Congress, and the public. It is unfortunate that those in responsible positions, especially in OES and

OWMR, did not resolve the controversy between OPA and WPB sooner.

These two volumes focus attention upon several major problems of price control in a wartime economy. To what extent should the objective of holding the price line become a dominant objective of the pricing agency? To what extent should price be used to facilitate the desired allocation of resources? To what extent should production controls be used in the civilian goods area? These are critical problems which must be faced by our war mobilization planners. These studies of the pricing standards used in World War II and of the problems of maintaining necessary supply deserve careful attention in all future planning.

JOHN PERRY MILLER

Yale University

Monopoly. By E. A. G. ROBINSON. (Cambridge: University Press. New York: Pitman Pub. Corp. 1941. Pp. xvi, 298. \$2.00.)

This book, one of the Cambridge Economic Handbook series, undertakes an analysis of the economics, forms, practices and effects of monopoly (and oligopoly), together with a survey of monopoly problems and public policy in the United States, Germany, and Great Britain. It is first-rate, as one would expect it to be.

The analytical portions of the book are tightly reasoned and tightly written; the author's skillful operation on monopoly pricing and output policies, and the relation of monopoly to productive efficiency and industrial stability is performed with confident precision. As a descriptive artist, Robinson is less conspicuously successful. He draws too heavily upon worn-out materials in the case both of the United States and Great Britain; the discussion of monopoly in Great Britain is a little remote from the firing line; and the handling of American antitrust legislation and litigation is inadequate.

Robinson's conclusions are neither new nor startling, but they gain strength from development and formulation at his hands. He belongs to the school which finds (correctly, in my judgment) the "monopoly problem" fully present in oligopoly, and which sees antitrust actions as resetting rather than solving our difficulties:

Two very important conclusions follow. . . . First, monopoly price is fully as much a consequence of the attitude of a small number of firms to each other, of the assumptions they make regarding each other, as of formal or informal agreements. We cannot assume that where there is no agreement, even of a tacit nature, competition exists. It all depends upon what one manufacturer thinks another manufacturer is going to do. It follows, therefore, that what we may call the detective story approach to the study of monopoly, the search for mysterious hidden agreements, is really a waste of time. Their existence may prove something, their non-existence proves nothing. Second, if we discover a condition of monopoly it is highly unlikely that we can with any certainty re-establish a condition of competition merely by breaking up that monopoly into a few constituent parts. It is very much more likely that

we shall substitute the uncertainties of a cat-and-mouse monopoly for the certainties of an open one (pp. 29-30).

In view of arguments recently advanced, it is gratifying to come upon Robinson's conclusion that while a monopoly may be able to stabilize the fluctuations in its own income during a depression, "it is likely to achieve its ends only at the cost of increasing the fluctuations both of its own output and of the incomes and welfare of others." This constitutes

a most serious indictment of monopoly. For we must not forget that it is the main justification of the existence of the entrepreneur that he carries the main risks of industrial production. If, through the creation of monopoly, he seeks to transfer those risks to the shoulders of others, he will inevitably suffer the universal fate of all redundant members and be replaced by some new organism better fitted to fulfill this function. Thus those who seek through monopoly to make the world safe for capitalism are probably doing more than anyone to ensure its ultimate destruction (p. 167).

The one point at which Robinson's analysis seems to me to be less than penetrating is in his treatment of the problem of economic power (p. 183 ff.), although it is certainly to his credit that he sees monopoly as a problem of power as well as of profit. Irresponsible power, more than any other characteristic, seems to me to constitute the undesirable feature of monopoly; but I would emphasize that it is the existence of such power and not alone its misuse that is abhorrent. Certainly its possible employment along the lines suggested by the author (pp. 185-86), where the monopolist chooses to be guided by economic considerations, does not impress me as a striking example of the evil of monopoly. Beyond this, however, and in the same area, Robinson in common with a number of other writers appears to confuse the problem of concentration of power within the corporation (consequent upon the growth of large-scale corporate enterprise) with the problem of concentration within the economy (consequent upon the growth of monopoly). The two problems are interrelated, of course, and concentration of control within the corporation certainly aggravates the dangers flowing from monopoly; but the problems are quite distinct and should be so treated.

The author has no pat remedy for monopoly. He recognizes that "when we turn from the present to the future, and from what is to what ought to be, we move inevitably from the field of objective fact into the field of subjective judgments. We cannot prove by logic how we ought to act" (p. 273). He considers three alternative policies—inaction, mitigation and abolition—and points out that the choice between them cannot be made on economic grounds alone. The decisions involve

our most deep-rooted political, social, economic, even religious principles. But we cannot be blind to these broader issues which impinge upon our studies, and pretend that they lie beyond the horizon of a strictly defined economics. If we seek to exclude them wholly from our scope, and more especially from the scope of an examination of monopoly, we shall confine ourselves to a profitless academic discussion of an unreal world (p. 288).

This is sound. But he might well have gone on to emphasize that we would be wise to make up our minds. With the forces of concentration growing stronger by the hour, a failure to decide constitutes in itself a continuing decision in favor of monopoly.

BEN W. LEWIS

Oberlin College

The History of Basic Metals Price Control in World War II. By ROBERT F. CAMPBELL. Studies In History, Economics and Public Law, No. 541. (New York: Columbia University Press. 1948. Pp. 263. \$3.25.)

This is a case study of wartime government control in an area in which price increases were kept to a minimum. The author states that the work, submitted as a doctoral dissertation, was conceived and executed while he was on the staff of the Office of Price Administration with the benefit of free access to official files.

Basic metals included in the study are iron, steel, aluminum, copper, lead, zinc and the scrap metals. A composite index of basic metals prices, on a monthly basis, 1939-1945, is compared with the Bureau of Labor Statistics wholesale price index by way of pointing up "success" in stabilizing metals prices. Monthly price movements for each of the metals included in the composite index are presented in an appendix.

Emphasis is placed upon administrative aspects of government price control as related to this particular group of commodities. Five of the eleven chapters cover such topics as techniques of price control, pricing standards, adjustments of price, etc. In addition, two chapters are wholly devoted to the premium price plan for copper, lead and zinc.

In the chapters on the administration of price control the author undertakes to present the major developments and considerations that were pertinent in policy decisions. For this purpose he has drawn upon his own experience and upon interviews with various members of the OPA staff in addition to using official statements and office memoranda. In discussing the early, informal, controls the author indicates the significance for the program of prewar pricing practices and the role of "administered" prices. The author points to the later difficulties resulting from functional division of authority and in a concluding chapter he points to the need for closer integration of production management, price control and labor allocation in the event a comparable program were put into effect at some future date.

Discussion of the premium price plan for copper, lead and zinc and a concluding chapter entitled "Prices, Production, Costs and Profits under Price Control" contain material and data of particular interest to the economist. The circumstances which cause a condition of "increasing costs" in mining operations are discussed without a labored use of the technical term or the marginal concept. Similarly, the non-ferrous metals differential, or discriminatory, pricing program is viewed in terms of economical government procurement and contrasted with the bulk-line pricing system followed in World War I.

At various points Dr. Campbell acknowledges the value of several of the early volumes in the OPA and WPB series of historical studies and in his Preface he calls attention to the OPA sponsored study, *Studies in Industrial Price Control* which appeared after his own work was completed. Several further volumes in the series have appeared since then, and the study *Problems of Price Control: Stabilization Subsidies* presents collateral material especially useful in considering savings effected by the government through use of the premium price plan.

As distinct from the government sponsored studies, the contribution of *Basic Metals Price Control In World War II* lies in the discussion of specific problems associated with government control over a group of related, standardized commodities, oriented in terms of the over-all interagency program. As such, it is a useful addition to historical studies on price control and on basic metals.

THEODORE F. MARBURG

Princeton University

Public Utilities; Transportation; Communications

Men, Cities and Transportation: A Study in New England History, 1820-1900. By EDWARD CHASE KIRKLAND. 2 vols. (Cambridge: Harvard Univ. Press. 1948. Pp. xvi, 528; ix, 499. \$12.50.)

The literature of transportation history is enormous, yet its quality leaves much to be desired. Many corporate histories of our major railroads carry the story of construction, finance and consolidation, but seldom contribute much to an understanding of the historical and economic role filled by the lines. Popular histories retail the romance of the rails and of other types of transportation—the early turnpikes, the canals, and more recently, in great profusion, the airways. All of these works lack comprehensiveness. Few pretend to weave the story of transportation into other phases of contemporary history in order to trace the reaction of improved transportation upon the economy and the reciprocal impact of the economy upon the course of transportation development. Few attempt to integrate the technical developments of the means of transportation with their reflection in service and rates and thus in the fortunes of industries, communities and regions—in short, to place transportation into focus among other factors responsible for economic growth and decline.

Aside from a few popular works, transportation history has for the most part been treated fragmentarily since the excellent *History of Travel in America* by Seymour Dunbar (4 vols., 1915) and the comprehensive *History of Transportation in the United States Before 1860* by Caroline E. MacGill and associates (1917). There is no recent history of transportation in America and there are few regional studies. New England, an area set apart somewhat by geographical and historical determinants, has a certain distinctiveness of transportation development which has given rise more often than other regions to treatment as a whole. The excellent *Formation of the New*

England Railroad Systems by George P. Baker (1937) and the more recent and popular *Steelways of New England* by Alvin F. Harlow (1946) are examples, but their objectives were limited and their treatment is specialized. Now comes, however, a serious historical study of New England transportation which in scope and scholarship surpasses earlier efforts.

Professor Kirkland suggests his point of view in the preface: "It is time for us to subordinate the phases of promotion and construction and explore, more fully than we have hitherto, the problems of rates, services, securities, technological changes, government policy, labor and management. . . . I have simply sought to treat the New England transportation system as a human response to the changing needs and ambitions of that area" (p. vii). A careful reading of these highly interesting pages will demonstrate that he has achieved substantial success in what is no doubt the most significant regional transportation history produced in recent decades. To the economist, historian or geographer the work is of large value in understanding an important element in the development of the New England economy.

The view of New England's pre-railroad transportation presented here is the most complete this reviewer has encountered. Of particular interest is the author's careful exploration of the routes taken by the western trade and of the relationships established between the ports and the interior as a result of topographic conditions unsurmounted by economical transport. The roots of Boston's difficulty in securing a share of the western business are well developed. The whole picture is thoroughly documented by reference to contemporary sources, many hitherto unexplored for their potential contribution to the history of transportation.

The era of railroad promotion is enriched in this treatment by the author's continuing concern with the specific hopes and aspirations of localities and groups, with the struggles surrounding state and local aid, and with the problems in experimentation encountered by not merely the railroad builders and operators but by public bodies as well. Of particular interest is the discussion of the early conflict of ideas with respect to proper rate-making policy centering about the divergence in the viewpoints of the Boston and Worcester and the Western Railroad managements. The sweeping penetration of boards of directors into such managerial concerns in this early period is well brought out. The driving urge for end-to-end consolidation even where the independence of connections was without threat developed naturally from the problems of making joint rates and agreeing upon divisions. It collided at once with the deep-seated antipathy of the community to monopoly translated into terms of mere size of the corporate enterprise.

Boston's frustration in its efforts to channelize a significant portion of the western trade through its own commercial and port facilities provides an important connecting thread through much of the first volume. The nature of the physical barriers which turned trade into the less costly channels toward New York during the pre-railroad era is carefully detailed, the characteristics of the resulting trade indicated, and the preferred transportation routes described. To many it will come as a surprise that the Lake

Champlain-Hudson River-Long Island Sound route was a customary one for freight movement between western New England and Boston and other port cities. And such traffic passed through New York and was in imminent peril of being short-circuited. The affinity of the Connecticut Valley towns for New York as their trade center is well known.

These, then, were the conditions which Boston aspired to alter by means of railroad development. Her success was decidedly limited, for New York State stood athwart the routes to the greater west, the New England railroads got no farther than Lake Ontario and Troy, and their connections from thence westward were in unfriendly hands. As the story of the physical development of the railroad system is chronicled, so also are the vicissitudes of the rate structure portrayed with care. Although this is a regional history, it contains a more thorough exploration of the efforts to control the trunk-line rate wars and to bring order into the rate structure east of Chicago than do other works which treat of this subject. It shows clearly, too, the conflict between the desires of the New England farmers for high rates on the western produce and the desires of the commercial centers for low rates on the same traffic.

Much emphasis is rightly placed upon the moving spirits behind the growth of improved transport—the prophets, promoters, financiers, engineers, critics and others connected in one way or another with the railway enterprise. The closeness of the ties between railroad promotion and politics are perhaps more concretely portrayed here than in most other works of railroad history. And the few dissenting representatives of the public interest are always appearing in these pages with their crusades for reform. New England, of course, gave rise to the earliest railroad commissions and a few of them were clothed with powers going beyond those merely of investigation and report. The Massachusetts Commission, reflecting the strong personality and strenuous endeavors of its first chairman, Charles Francis Adams, Jr., led the way in much that was important in the improvement of safety and the regularizing of rates and accounts. This work suggests that the accomplishments of these early state commissions have been hitherto underrated and that they deserve greater emphasis in the history of transportation regulation. Of great interest is the conservatism of New England railroad managers. The practical tradition here went to extremes which set back the application of proved technology by many years, long after successful use had been made on the roads of other regions. Indeed the long adherence to tried practice and rule of thumb is perhaps without equal elsewhere and at other times in American railroading. It would appear that the Massachusetts Commission particularly deserves much credit for jolting the railway managers out of their comfortable life in the past.

In sum, here is a contribution not merely to the synthesis of the hitherto known history of the New England transportation system, but one which also adds in significant ways to our knowledge of that history. Moreover, it is a well-written and consistently interesting account.

ERNEST W. WILLIAMS, JR.

Columbia University

Land Economics; Agricultural Economics; Economic Geography

Real Estate Analysis. By WILLIAM H. HUSBAND and FRANK RAY ANDERSON.
(Chicago: Richard D. Irwin. 1948. Pp. vi, 576. \$5.00.)

Whatever connotation the term "real estate analysis" may have for the reader, it likely will not fit the content of this book. But it is of little importance that the volume is mistitled for between its covers is a most useful compendium of real estate knowledge; the field is well covered and the text reads the more easily by reason of a mildly discursive style and a thread of politico-economic philosophy. The authors see as the paramount real estate problem the "reconciliation of the public and private interest."

This volume might be characterized as a work of descriptive or behavioristic economics. It is institutional economics without a theoretical binder. There is no distinguishable "economics" of real estate, no orderly theoretical framework which ties together the subject matter into a recognizable structure; only by implication is there a linkage with general economic theory. But in spite of a preoccupation with social control and governmental intervention, there is a real understanding of the economics of the real estate market though it be expressed in other than economic jargon.

The first of five parts of the volume considers Real Estate and the Economy with chapters on the institutional aspects of real property, the importance of real estate in the national economy, a too brief discussion of urbanization, the urban land use structure and city finances, and final chapters on land development and the construction industry with a good presentation of the major problems of house building. Part II is a useful pocket text on the fundamentals of real estate law. Part III, The Real Estate Market, contains excellent chapters on the factors and processes of the urban land market and its cyclical aspects. There is a good chapter on real estate value and less useful discussions of the appraisal process, selling real estate, and property management.

The strongest section of the book is Part IV, The Financing of Real Estate. This strength reflects the background of the senior author, William H. Husband, a former professor of finance, and successively member of the Home Loan Bank Board, manager of a savings and loan association, and presently, general manager of the Federal Savings and Loan Insurance Corporation. On a subject which so rarely receives adequate treatment in current business and economic writings, it is refreshing to read a discussion of substance. The chapters cover the nature of mortgage risk, the operations of the mortgage market, sources of funds in primary and secondary markets, the processes of mortgage lending, and sound lending practice. There is an understandable emphasis on federal intervention in the home mortgage field. From authors so well qualified to pass judgment, the reader might wish for incisive evaluation of governmental policy, but a discreet reticence on the part of authors serving in governmental posts is not unexpected.

The final group of chapters, Part V, The Public Interest, provides the authors with the opportunity to express a middle-of-the-road philosophy on

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the public housing issue. There are warnings to private industry to solve its own problems before housing shall be fully socialized and warnings to the public housers that too much governmental intervention endangers our basic economic system. The chapter on taxation states the case for the relief of real estate from an unjustified burden; the discussion of eminent domain is soundly legalistic; planning and zoning are briefly considered with a good section on urban redevelopment. The discussion of the veterans' housing program is primarily descriptive and the final chapter chews over the public-private conflict in the real estate field without finally digesting it.

Except for the section on real estate finance, this volume does not add a great deal to the real estate books of recent years. The several topics have been covered more or less adequately by others, for example, by Colean,¹ Hoagland² and Weimer and Hoyt.³ The authors show less than adequate interest and understanding in dealing with the land use structure of cities. They are not too successful in presenting an "economics" of urban land for they have segmentalized and institutionalized the subject matter until the underlying economic relationships, which might have been laid bare for all to see, are somewhat obscured. But the book does provide an up-to-date descriptive analysis of the primary factors and processes which constitute the real estate market and the institutional framework within which they operate.

RICHARD U. RATCLIFF

University of Wisconsin

Labor

Labor Unions in Action. By JACK BARBASH. (New York: Harper. 1948. Pp. x, 270. \$3.50.)

The outpouring of articles, pamphlets, monographs and textbooks covering various phases of industrial relations has been impressive and almost frightening during the past year or two. Of all these publications, *Labor Unions in Action* is one of the most sensible and least pretentious. Mr. Barbash is widely acquainted with union leaders, familiar with the literature of industrial relations, and capable of discussing controversial subjects without undue excitement. (Only on the subject of "Communist Unionism" does he become really emotional.) As a result, he has written a reasonable and informative volume describing how trade unions are organized, administered and led.

The scope of *Labor Unions in Action* is indicated by the chapter titles: Union Structure and Jurisdiction, Union Government and Administration, Collective Bargaining, The Strike, Extracurricular Union Activities, Union Leadership, and so on. At first sight the approach appears to be quite customary, since all of these subjects are described in previous works such

¹ Miles L. Colean, *American Housing* (New York, The Twentieth Century Fund, 1944).

² Henry E. Hoagland, *Real Estate Principles* (New York, McGraw-Hill, 1940).

³ Arthur M. Weimer and Homer Hoyt, *Principles of Urban Real Estate*, Rev. ed. (New York, Ronald Press, 1948).

as those of Millis and Montgomery, Peterson, and Taft. Mr. Barbash's treatment is distinctive in several respects, however. First is the cool and dispassionate analysis of jurisdictional disputes, working rules, general strikes, picket-line violence and other conventional objects of indignation. Second is the emphasis on opportunism as the guiding principle of union structure, jurisdiction, and strategy. Third, and most interesting, is the vantage point of the analysis. Mr. Barbash is looking through the eyes of the labor organizer, the business agent, the local union president, the international representative, and the other non-commissioned and commissioned officers of the labor movement. As he states, "the perspective throughout is that of the union spokesman who is candidly describing and interpreting his own behavior." For all our studies of pricing and production, most of us know next to nothing of how the business executive really operates; and despite the current effusion of literature on industrial relations, the world in which the union leader moves is still for the most part dark and unexplored.

The picture which emerges is one of an essentially opportunistic institution endeavoring to make its way in the world and keep its head above water. There are great diversities in structure, program and ideology; but "for most unions, organizing new members, administering the affairs of the union, collective bargaining and strikes are the core functions because the maintenance of the union as a going institution depends on the adequate discharge of these functions." The run-of-the-mill union leader is revealed to be neither a latter-day saint nor a cynical and corrupted autocrat; he is governed primarily by the immediate pressures converging upon him, secondarily by his notions concerning "good trade unionism," and to a much smaller extent by his ideological sentiments.

Mr. Barbash's naturalistic approach has great advantages, but it also has a price. The basic limitation is the limited insight of the union leader, who is not especially concerned with the ultimate significance of his activities nor in a good position to appraise it. Thus, it is true that "the usurpation of management prerogatives in any wholesale sense has little attraction for the union as an end in itself"; but this does not mean that, over the years, unions will not insist on playing a continuously larger part in the administration of industry. To state that "management prerogatives are of concern only . . . as they appear to impinge on wages, hours and working conditions" is an accurate description of trade-union mentality, but of no great significance for the long run. Similarly, "it is extremely unlikely that the organized labor movement as a movement, or any substantial segment of it, will lend itself seriously to any revolutionary political upheaval in the United States"; but this does not settle the chronic questions of tendency which the Webbs, Perlman, Tannenbaum, and other students have wrestled with. What is the political drift of the labor movement as it moves along in its opportunistic way? Is it undermining the structure of capitalism, or buttressing it? Who is on the wave of the future—Beck, Lewis, Dubinsky, Reuther or Bridges?

Mr. Barbash does not throw much light on questions of this kind, but then he does not claim to. His book will stand on its own merits as a valuable

account of what makes unions tick and why union leaders behave like union leaders.

ARTHUR M. ROSS

University of California, Berkeley

Personnel Administration: A Point of View and A Method. By PAUL FIGORS and CHARLES A. MYERS. (New York: McGraw-Hill. 1947. Pp. ix, 553. \$4.50.)

This book on personnel administration is designed as a college textbook. It primarily presents and provides an illustrative application of a technique of analysis of personnel problems. It avoids all industrial relations and economic problems as outside of the personnel man's primary interest. The authors build upon the work done by the Harvard Business School at the Hawthorne plant of the Western Electric Company and share the interpretations of human relations popularized by F. J. Roethlisberger. The cornerstone of this book is therefore the study of a worker's attitude to his job, management, and supervision. Industrial case work is the approach toward the solution of problems. The interview is the tool for getting the facts. Employee counseling, only casually referred to, is the technique for handling the more difficult cases which the regular management line organization is not prepared to solve.

In this context, the successful personnel administrator aims at creating industrial team work to assure "maximum efficiency and competitive advantage" in a plant directed and controlled by top management in its own economic interest. This goal can be best achieved by relieving employee dissatisfactions, *i.e.*, "anything that disturbs an employee whether or not he expresses himself in words."

At the outset the authors report themselves as being handicapped by the current lack of knowledge, as they inform the reader in a footnote (p. 40), that "there is at present no clear-cut agreement as to what these principles (of personnel administration) should be." The book therefore has not a set of unifying principles for interpreting human behavior, though the principal subject is human attitudes. There is no statement of social and economic goals for personnel administration to achieve other than those prevailing among the top management of the industrial enterprise.

The authors do not evaluate the different types of dissatisfactions and the priorities which should be observed in relieving them. Can one hope to resolve all? Are our present industrial, technical, economic, and institutional arrangements compatible with the goal of eliminating human dissatisfaction? Is dissatisfaction an adequate index of the excessive costs of work or economic and social activity? Can all causes of dissatisfaction be reached through the personnel management of the individual industrial enterprise? What do you do about the residue of unrelieved dissatisfaction? What is the personnel man's responsibility in dealing with unresolved personal conflict? How adequate for the purpose of eliminating industrial dissatisfaction is the approach by way of the individual dissatisfaction? These and many kindred problems

are not raised in this book. The discovery of personal maladjustment because of personal conflicts has narrowed the range of interest in the "labor problem."

By building their system of personnel administration around a method of analysis, the authors subordinate the discussion of substantive matters to the description of the procedure of handling them according to this approach. The book acquaints the personnel administrator with the case-method approach toward relieving worker dissatisfaction with the hope of advancing management's objectives. The interviewing technique is used to get data on attitudes. The information is to be analysed according to the "situational thinking" process which requires the personnel administrator to consider the technical features, the human factors, the principles (which are unavailable) and policies, and the time factor.

With these aids the personnel administrator can perform the following staff functions: (1) "advise and assist the line organization in the personnel approach (skillful handling of people both as individuals and as group members); (2) to diagnose the stability or morale of the organization as an effective work team, by means of various indexes of team work such as productive efficiency, absenteeism, accidents, labor turnover and internal mobility, and complaints and grievances; and to keep the line management informed of actual or potential difficulties that need their joint attention; (3) to provide personnel procedures and services such as recruitment, hiring, selection, training, wage and salary administration, safety education, etc., as an aid to the line officers in getting more effective results through the people under them; (4) to secure coordination and control of these activities through top management, which has full responsibility for seeing that they are uniformly and consistently administered."

The text is most explicit and confident in discussing the methods of diagnosing organizational stability and in dealing with "the building and maintaining work teams" as they relate to personal relations and reactions. In the analysis of substantive problems such as wages and hours and the presentation of the issue of employee participation in production problems the authors limit their discussion, take highly cautious and qualified positions, and do not fully relate the handling of these crucial issues to their main theme, namely, handling human dissatisfaction.

The overwhelming interest in method of analyzing problems makes the book most useful as a practical interpretation of the findings of the Hawthorne inquiry. A student of personnel problems would have to use other texts to gain actual instruction and practice in interviewing, in the analysis and understanding of human behavior and motivation, in the administration of specific personnel techniques, in industrial relations, labor problems, social movements, trade-unionism, and current economic and political problems. The text presents little information on the limitations of current personnel techniques, their misuse, and the unrest created by their application. Supplementary data would have to be distributed to acquaint the student with these matters. The reader is not encouraged to develop a scientific attitude

toward these techniques as the authors fully adopt the current management "code of the ways of organizing and treating individuals at work."

Trade unions are approved by the authors but they assign them a modest role within this system of management controlled personnel administration. It is to aid in "opening a new channel for complaints." The authors do not inquire into the share of responsibility the union should have in resolving dissatisfaction and its effect on the duties and rights of management.

The trade union arises from the long period of repression and second-rate citizenship suffered by workers. It expresses his frustrations and hopes, and yearnings. They arise from the experiences both within and outside the plant. One gains the impression that the aim of this proposed approach is to minimize the dissatisfactions associated with the job, management, and supervision. Possibly, it is hoped thereby to divert workers' dissatisfactions. Will the volume of dissatisfaction be reduced? What new target should the dissatisfaction seek? What success can such an approach have? Will it lead to even greater frustration?

Management sorely needs data and analysis which will give it a better understanding of the "labor problem." Adequate personnel administration can be built only on a broad understanding of the worker, his language, his personality (which is vastly different from the prototypes commonly proposed to management), his institutions, his values and demands. The social scientist has unfortunately done little to enlighten our American people on this score. An adequate textbook must rest on a broader base of knowledge and inquiry than is offered by this book.

This volume is supplemented by a rich collection of well-presented case histories. Questions are submitted to aid and guide discussions and to illustrate the method of analysis. The rounded bibliography definitely complements the text and offers the student guides on the source of ideas and further development of specialized knowledge.

SOLOMON BARKIN

New York, N.Y.

Population; Social Welfare and Living Standards

Population Analysis. By T. LYNN SMITH. (New York: McGraw-Hill. 1948. Pp. xii, 421. \$4.50.)

This book, which is primarily a study in demography, has been written as a text for an introductory course in population. The purpose of the author is to summarize important population facts and to stress proper methodology in population analysis. In his opinion, the emphasis by others on what is generally termed "population problems" is to be avoided. "The avoidance of the pathological emphasis [on such problems] is deliberate." He desires to train the student in the techniques of population analysis and does not believe that it is desirable to deal with many phases of population study which he regards as entirely speculative and philosophical.

The material for this study is divided into six main divisions or parts.

These parts are as follows: number and distribution of the population; composition; the vital processes; migration; growth; and conclusion. The general plan is to begin with an analysis of world data and conclude with a study of the figures for the United States. Part I consists of a single introductory chapter which gives estimated population throughout the world by countries and concludes with the number and distribution of people in the United States. These figures together with land areas emphasize the unequal distribution of people throughout the world. There is also included a short discussion of the concept of the optimum population. In Part II will be found a detailed analysis of population by race, age, marital and educational status, religion and occupation. The subjects of fertility and mortality, called the vital processes, are taken up in Part III. Here the student will find an interesting treatment of birth and death rate differentials, the problem of measurement of fertility, and the declining birth rate. The study of migration in Part IV comprises four chapters. An attempt is made in this division to summarize the important sociological studies dealing with the selectivity of migration. One chapter is devoted to internal migration. The growth of population, together with the related topics dealing with techniques for estimating this growth, are treated in one single chapter. Smith believes that an official estimate for our next census of approximately 145,460,000 is about one and one-half million too low. He has little regard for any idea that some practical use might some day be made of the concept of the optimum population. In the final part there are no elaborate or striking conclusions.

In keeping with the objectives set forth in the beginning, there is a plea for a more thorough analysis and study of demographic materials rather than speculative and unfruitful discussions. Studies of actual demographic materials are much to be preferred over the theories of "armchair philosophers." Only by the assembly, classification and study of population facts can we make the analysis realistic and meet the need for many public services such as education and health. No attempt is made to outline any definite population policy for the United States. Our immigration policy, he says, will come in for increasing attention. It is the author's opinion that no national policy with respect to the fundamental matter of the birth rate is likely to be developed in the near future as the question of birth control is a highly controversial issue.

When the reader examines this book and compares it with *Population Problems* by such writers as Thompson or Landis, he will find that the author has succeeded well in leaving out much material considered to be irrelevant and unnecessary. Here he will not find the familiar discussions of such topics as "danger spots," the city, or the various population theories. It is difficult to get away from habitual ways of thinking. The study of population is often said to begin with Malthus, yet there is only slight mention of him, in the last pages of the book. The name of Malthus is not listed in the index. The author is unalterably opposed to the whole idea of "mankind at the crossroads," yet nothing is said to refute the belief which

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many still hold that there is an essential element of truth in the Malthusian doctrine in the long run. Little is given about the population policies of foreign countries or of the policies which have been discussed and proposed for this country. Smith has elaborated numerous techniques of population analysis and has left out some of the most basic questions and problems in the entire field.

Much reliance is placed upon the graphic methods used in this study, many of which are said to be original with the author. The most frequent type of chart is that of a map with density or other quantitative data represented by circles (Fig. 86, p. 179). This map chart with balls for quantitative data is repeated many times throughout the entire book (pp. 22, 41, 52, and numerous others). The difficulty of making accurate comparisons from maps of this character is a very old and familiar fact. Larger quantities are better shown by a large quantity of symbols, not by larger symbols. "We must remember that if one circle has a diameter twice as great as another, then the first circle has an area four times that of the second."¹ To overcome this objection, the author often sets out in the legend various circles with figures. It is not at all certain that the general criticism of this type of map chart has been overcome. It seems certain that many readers will have difficulty in following the data of various charts with curves showing figures of mortality or birth trends. The differences between the curves are so slight and there are so many curves on the chart that it is almost impossible in some instances to follow those of a particular country (for example, see pp. 136 and 224).

Although this book will probably not displace the type of population text now in general use, it will provide valuable supplementary reading material. It contains an abundant amount of demographical material brought up to date. The general conclusions based on this material are sound and free from bias. Several valuable suggestions for improving statistical data are given, and there are many interesting facts about the historical development of methods and practices. Population students will welcome Smith's book as another valuable study in a field of learning in which there is a constantly growing interest.

LAWRENCE R. CHENAULT

Hunter College

¹ Croxton and Cowden, *Applied General Statistics*, pp. 134 and 144.

TITLES OF NEW BOOKS

Economic Theory; General Economics

- ALLEN, C. L., MORGNER, A., and STROTZ, R. H. *Problems for economic analysis*. (New York: Prentice-Hall. 1948. Pp. xi, 148. \$1.85.)
- BODDY, F. M., editor. *Applied economic analysis*. (New York: Pitman. 1948. Pp. 589. \$3.75.)
- CHASE, S. *The proper study of mankind—an inquiry into the science of human relations*. (New York: Harper. 1948. Pp. xx, 311. \$3.)
- CLARK, H. B. *Economics*. (New York: American Book Co. 1948. Pp. 520. \$2.48.)
- COE, A. *Economics for everyman*. (London: Chapman & Hall. 1948. Pp. xii, 275. 15s.)
- DILLARD, D. *The economics of John Maynard Keynes*. (New York: Prentice-Hall. 1948. Pp. xv, 364. \$3.75.)
- DODD, J. H., and HASEK, C. W. *Economics—principles and applications*. (Cincinnati: South-Western Publishing Co. 1948. Pp. vi, 729. \$4.50.)
- FRASER, L. M. *Economic thought and language—a critique of some fundamental economic concepts*. Reprint. (London: Adam and Charles Black. New York: Macmillan. 1947. Pp. xx, 411. \$5.)
Reprinted without change from the 1937 edition.
- HARRIS, S. E. *Saving American capitalism—a liberal economic program*. (New York: Knopf. 1948. Pp. xviii, 379. \$4; text ed., \$3.)
- HOWE, G. *Economics for the practical man*. (Chicago: Wilcox and Follett. 1948. Pp. vi, 154. \$2.)
A conservative treatment of conventional topics so condensed as to be of doubtful use even to the audience for which it is intended.
- LOGAN, H. A., and INMAN, M. K. *A social approach to economics*. 2nd ed. rev. and enlarged. (Toronto: Univ. of Toronto Press. 1948. Pp. xix, 757. \$5.50.)
- MEYERS, A. L. *Modern economic problems*. 2nd ed. (New York: Prentice-Hall. 1948. Pp. xvii, 350. \$3.25.)
- MYINT, H. *Theories of welfare economics*. (Cambridge: Harvard Univ. Press, for the London School of Economics and Political Science. 1948. Pp. xiii, 240. \$4.)
- NOGARO, B. *Les grands problèmes de l'économie contemporaine*. (Paris: Presses Univ. de France. 1947. Pp. 128.)
- PETTENGILL, R. B. *Price economics*. (New York: Ronald Press. 1948. Pp. xiii, 483. \$4.50.)
- PIROU, G. *La valeur et les prix*. (Paris: Recueil Sirey. 1948. Pp. 538.)
Written in 1945-46 and published posthumously.
- WILSON, H. A. *A glossary of economic terms*. 2nd ed. (Chicago: Economic Inst. 1948. Pp. 32. 75¢.)
- Bibliography in economics for the Honour School of Philosophy, Politics and Economics* (Oxford: Basil Blackwell. 1948. Pp. 40.)
- Dictionary of modern economics*. A handbook of essential information concerning the basic terms of business, finance, commerce and modern economic society compiled by B. J. Horton, J. Ripley and M. B. Schnapper. (Washington: Public Affairs Press. 1948. Pp. ix, 365. \$5.)
- Register of research in the social sciences in progress and in plan* No. 5, 1947-48. Prepared

at the Nat. Institute of Economic and Social Research, London. (London: Cambridge Univ. Press. 1948. Pp. 104.)

Research frontiers in human relations. Proceedings of the American Philosophical Society meeting, Feb. 6-7, 1948, in Philadelphia. (Philadelphia: Am. Philosophical Society. 1948. Pp. 86. \$1.)

Economic History; National Economies

ASHTON, T. S. *The Industrial Revolution 1760-1830.* Hone Univ. Lib. of Mod. Knowledge 204. (New York: Oxford Univ. Press. 1948. Pp. v, 167. \$2.)

BATTEN, T. R. *Problems of African development.* Pt. II, *Government and people.* (New York and London: Oxford Univ. Press. 1948. Pp. viii, 180. \$1.25.)

BLUM, J. *Noble landowners and agriculture in Austria, 1815-1848—a study in the origins of the peasant emancipation of 1848.* Johns Hopkins Univ. stud. in hist. and pol. sci. ser. lxxv, no. 2. (Baltimore: Johns Hopkins Press. 1948. Pp. 295. \$4.)

BONNÉ, A. *State and economics in the Middle East.* (London: Routledge and Kegan Paul. 1948. Pp. xiv, 427. 30s.)

BURGIN, M., editor. *Handbook of Latin American Studies: 1945.* No. 11. Edited for the Library of Congress. (Cambridge: Harvard Univ. Press. 1948. Pp. ix, 404. \$7.)

Contains economic articles by S. A. Mosk, Miron Burgin and Roberto Simonsen.

DE ROOVER, R. *Money, banking and credit in mediaeval Bruges—Italian merchant-bankers, Lombards and money-changers—a study in the origins of banking.* (Cambridge, Mass.: The Mediaeval Academy of America. 1948. Pp. xvii, 420. \$8.75.)

DEWETT, K. K., and SINGH, G. *Indian economics.* 3d ed. (Delhi: Premier Pub. Co. 1948. Pp. xi, 806. Rs. 12/8.)

A remarkably comprehensive compendium of data on the Indian economy and introduction to its economic problems. The new edition contains a discussion of the economic effects of partition.

GIDE, C. and RIST, C. *A history of economic doctrines from the time of the physiocrats to the present day.* 2nd Eng. ed. (Boston: D. C. Heath. 1948. Pp. 800. \$7.)

Authorized translation by R. Richards with additional materials from the latest French edition translated by E. F. Row. Contains a new book VI with chapters on "general review of theories of international trade" and "conflicting theories of crises."

GULICK, C. A. *Austria from Habsburg to Hitler.* Vol. I, *Labor's workshop of democracy.* Vol. II, *Fascism's subversion of democracy.* (Berkeley and Los Angeles: Univ. of California Press. 1948. Pp. xxiii, 771; xi, 1132. \$20.)

KUCZYNSKI, J. *Studien zur geschichte des deutschen imperialismus.* Vol. I, *Monopole und unternehmerverbände.* Mit bibliographie zur monopolfrage von H. Alberts. (Berlin: Dietz Verlag. 1948. Pp. 403.)

McKITTERICK, T. E. M. *Russian economic policy in Eastern Europe.* (London: Fabian Pubs. Ltd. and Victor Gollancz. 1948. Pp. 40. 2s.)

MORGAN, T. *Hawaii—a century of economic change, 1778-1876.* (Cambridge: Harvard Univ. Press. 1948. Pp. xi, 260. \$4.)

PILLIET, G. and others. *Inventaire économique de la France—1948.* (Paris: Les Ordres de Chevalerie. 1948. Pp. 417.)

PRZEDPELSKI, B. J. *Agricultural extension education in Poland, 1918-1939.* (New York: King's Crown Press. 1948. Pp. x, 139. \$2.50.)

SCHÖNKE, A., editor. *Postwar reconstruction in western Germany.* The Annals, vol. 260, Nov., 1948. (Philadelphia: Am. Acad. of Pol. and Soc. Sci. 1948. Pp. vii, 250. \$2.)

SHAW, A. G. L. *The economic development of Australia.* Rev. ed. (New York: Longmans, Green. 1948. Pp. 193. \$2.)

SMOTHERS, F., McNEILL, W. H., and McNEILL, E. D. *Report on the Greeks*. Findings of a Twentieth Century Fund team which surveyed conditions in Greece in 1947. (New York: Twentieth Century Fund. 1948. Pp. vii, 226. \$2.50.)

SOLEY GÜELL, T. *Historia económica y hacendaria de Costa Rica*. Vol. I. (San José: Univ. de Costa Rica. 1947. Pp. 346.)

WEITER, D. *The age of the great depression, 1929-1941*. Hist. of Am. life, vol. 13. (New York: Macmillan. 1948. Pp. 448. College ed., \$5.)

WILBER, D. N. *Iran—past and present*. (Princeton: Princeton Univ. Press. 1948. Pp. xi, 234. \$3.)

Business biographies and company histories. Preliminary ed. (Boston: Harvard Univ. Grad. School of Bus. Admin. 1948. Pp. 54. \$1.)

La France économique de 1939 a 1946. (Paris: Recueil Sirey. Pp. 890.)

This volume consists of papers originally published in two 1947 issues of the *Revue d'Economie Politique* as follows: *La population*, by H. Bunle; *L'évolution des prix depuis la guerre*, by R. Rivet; *Le revenu national français*, by R. Froment et P. Gavanier; *Domages, réparations, reconstruction*, by J. Vergeot; *La législation fiscale*, by L. Trotobas; *Le marché de l'argent a court terme*; *Le marché des changes*, by P. Vigreux; *Les banques*, by A. Pose; *La bourse des valeurs*, by J. Dessirier; *Les émissions*, by P. Haour; *Les caisses d'épargne*, by H. Anglade; *Les assurances*, by J. Fourastié; *La production agricole*, by P. Fromont; *La production industrielle*, by S. Béracha; *L'organisation professionnelle*, by G. Liet-Veaux; *Les échanges intérieurs*, by A. Piatier; *Le commerce extérieur*, by J. Weiller; *La balance des paiements*, by R. Jolivot; *La législation commerciale interne*, by A. Tunc; *La politique commerciale et les accords commerciaux*, by J. Naudin; *L'évolution des transports*, by J. Mothes; *La marine marchande et les ports*, by J. Marchegay; *L'Union française depuis la guerre*, by J. Pellier; *L'évolution des salaires depuis 1938*, by J. Lehoulier; *Le mouvement ouvrier et la politique syndicale*, by G. Dehove; *La législation sociale*, by H. Bartoli; *Assurance sociale et sécurité sociale*, by E. Antonelli; *Le ravitaillement en France depuis 1940*, by A. Heilbronner; *Habitations et logement*, by M. Aucuy.

Gesamtschau der österreichischen wirtschaf im jahre 1947. (Vienna: Österreichisches Institut für Wirtschaftsforschung. 5. Sonderheft, 1948. Pp. 52.)

Trends in American capitalism; profits and living standards. (New York: Internat. Pubs. 1948. Pp. 128. \$1.50.)

Statistics and Econometrics

CROXTON, F. E., and COWDEN, D. J. *Practical business statistics*. 2nd ed. (New York: Prentice-Hall. 1948. Pp. xviii, 550.)

SAYRE, R. A. *Consumers' prices 1914-1948*. (New York: Nat. Indus. Conference Board. 1948. Pp. 86.)

A substantial portion of the study describes the methods and procedures used in constructing the index.

WILKS, S. S. *Elementary statistical analysis*. (Princeton: Princeton Univ. Press. 1948. Pp. xi, 284. \$2.50.)

Report of the Social Science Research Council Committee on analysis of pre-election polls and forecasts. (New York: Soc. Sci. Research Council. 1948. Pp. 18, mimeo.)

Selected world economic indices. (Lake Success: U.N. Dept. of Economic Affairs. 1948. Pp. 53.)

Economic Systems; Planning and Reform; Cooperation

HEATON, H., and JOHNSON, A. *Socialism in western Europe*. Headline ser. no. 71. (New York: Foreign Policy Assoc. 1948. Pp. 62. 35¢.)

VOZNESENSKI, N. A. *The economy of the U.S.S.R. during World War II*. Issued in co-operation with the Am. Council of Learned Societies. (Washington: Public Affairs Press. 1948. Pp. 103.)

The original Russian was reviewed in the September, 1948 issue of this *Review*.

Cooperatives in postwar Europe. (Washington: Supt. Docs. 1948. Pp. 22. 15¢.)

Ier congrès international de l'Économie Coopérative, 15-20 novembre 1947, Paris—rapports principaux et quelques extraits des interventions. (Paris: l'Économie Coopérative. 1948. Pp. 54, mimeo.)

Review of the co-operative movement in India 1939-46. (Bombay: Reserve Bank of India. 1948. Pp. 111.)

National Income and Social Accounting

EAKIN, F. *Price problems—an accounting report*. (Decatur, Ill.: Econ. Accounting, Inc. 1948. Pp. 43. \$1.)

Income receipts of individuals in Maryland: flow of consumer purchasing power; department store sales as income forecaster. Stud. in Bus. and Econ., vol. II, Dec., 1948. (College Park: Univ. of Maryland Bur. of Bus. and Econ. Research. 1948. Pp. 12.)

International bibliography on income and wealth, Jan.-Sept., 1948. Annotated quarterly report prepared in cooperation with the Statistical Office of the United Nations. (New York: Nat. Bur. Econ. Research. 1948.)

Business Fluctuations; Prices

ARDANT, H. *Les crises économiques*. (Paris: Flammarion. 1948. Pp. 437.)

BABSON, R. W. *If further inflation comes*. Rev. ed. (Philadelphia: Lippincott. 1948. Pp. 240. \$1.50.)

HOPKINS, E. *The high crime of inflation: how to restore the purchasing power of the dollar*. (New York: Author, 255 West 43rd St. 1948. Pp. 217. \$4.)

WYTENBACH, E. *Die wechselseitige konjunkturabhängigkeit von landwirtschaft und industrie in den USA, 1919-1941*. (Bern: A. Francke. 1948. Pp. 250. 28 sw. fr.)

The business outlook 1949. A forum discussion. Stud. in bus. econ. no. 19. (New York: Nat. Indus. Conf. Board. 1948. Pp. 56. 50¢.)

Council of Economic Advisers: third annual report to the President, December, 1948. (Washington: Supt. Docs. 1948. Pp. 38. 15¢.)

The economic report of the President to the Congress, January 7, 1949. With a report, *The annual economic review, January 1949*, by the Council of Economic Advisers. (Washington: Supt. Docs. 1949. Pp. v, 140. 45¢.)

Monetary and fiscal policy for greater economic stability. A statement on national policy by the CED. Research and Policy Committee. (New York: Committee for Econ. Development. 1948. Pp. 55, mimeo.)

Wholesale prices, 1946. (Washington: Supt. Docs. 1948. Pp. 137. 25¢.)

Money and Banking; Short-Term Credit; Consumer Finance

AFTALION, A. *Monnaie et économie dirigée—la valeur de la monnaie dans l'économie contemporaine*. (Paris: Recueil Sirey. 1948. Pp. 414.)

BRADFORD, F. A. *Money and banking*. 6th ed. (New York: Longmans, Green. 1949. Pp. xvii, 860. \$4.75.)

DIETERLEN, P., in collaboration with RIST, C. *The monetary problem of France*. (New York: King's Crown Press, for the Carnegie Endowment for International Peace. 1948. Pp. xvii, 98. \$2.50.)

- HALAAS, E. T. *Impact of the war on commercial banking in Colorado*. (Denver: Univ. of Denver Bur. of Bus. and Soc. Research. 1948. Pp. iv, 51, mimeo.)
- LINTNER, J. *Mutual savings banks in the savings and mortgage markets*. (Boston: Harvard Univ. Grad. School of Bus. Admin. 1948. Pp. xi, 559. \$6.50.)
- O'HARA, J. L. *Money and banking*. (New York and London: Pitman. 1948. Pp. xx, 671. \$4.75.)
- Banking statistics—recommendations on scope and principles of classification*. Report of the Sub-Committee on Banking Statistics of the League of Nations Committee of Statistical Experts. (New York: Columbia Univ. Press. 1948. Pp. 42. 25¢.)

Business Finance; Investments and Security Markets; Insurance

- BURTCHETT, F. F., and HICKS, C. M. *Corporation finance*. Rev. ed. (New York: Harper. 1948. Pp. vii, 712.)
- DAUTEN, C. A. *Business finance*. (New York: Prentice-Hall. 1948. Pp. xiii, 551. \$6.35; text ed., \$4.75.)
- MCCORMICK, E. T. *Understanding the Securities Act and the S.E.C.* (New York: American Book. 1948. Pp. 335. \$7.50.)
- Capital formation under free enterprise*. (New York: Nat. Assoc. Manufacturers. 1948. Pp. 88. Apply.)
- Compendium of official life insurance*. 60th annual ed. (Philadelphia: The Spectator. 1948. Pp. 309. \$12.)
- More inflation: how to protect your savings with common stocks*. (New York: Standard & Poor Corp. 1948. Pp. 165. \$10.)
- Spectator insurance year book, 1948-49 (corrected to August 1, 1948)*. 76th annual issue. (Philadelphia: The Spectator. 1948. Pp. 992. \$50.)
- A study of ownership of corporations in Hawaii*. (Honolulu: Hawaiian Econ. Foundation. 1948. Pp. 35.)

Public Finance

- BUEHLER, A. G. *Public finance*. New 3d ed. (New York: McGraw-Hill, 1948. Pp. xiii, 740. \$5.)
- COHEN, R. N. *The financial control of education in the consolidated city of New York*. With special reference to interrelations between the public school system, the municipal government, and the state. (New York: Columbia Univ. Teachers College. 1948. Pp. xi, 212. \$3.)
- JOYCE, S., and KILCULLEN, R. *The federal income tax; a guide to the income tax provisions of the International Revenue Code, the income tax regulations and the more important code decisions*. (New York: Clark Boardman. 1948. Pp. 359. \$6.)
- LINDHOLM, R. W. *Introduction to fiscal policy*. (New York: Pitman. 1948. Pp. 248. \$2.75.)
- MONTGOMERY, R. H., and others. *Montgomery's federal taxes—corporations and partnerships, 1948-49*. Vol. I, *Gross income and deductions*; vol. II, *Taxes, returns and administration*. (New York: Ronald Press. 1948. Pp. 885. \$20.)
- MONTGOMERY, R. H., and WYNN, J. O. *Montgomery's federal taxes—estates, trusts and gifts, 1948-49*. (New York: Ronald Press. 1948. Pp. 1277. \$10.)
- NOGARO, B. *Note sur notre politique financiere dans ses rapports avec la defense du franc*. (Paris: Author, Faculty of Law, Univ. of Paris. Pp. 16.)

- PARDUE, B. L. *State supervision of the property tax assessments in Kentucky*. (Lexington: Univ. of Kentucky Bur. of Bus. Research. 1948. Pp. 67.)
- STANLEY, J., and KILCULLEN, R. *The federal income tax—a guide to the law*. (New York: Simmons-Boardman. 1948. Pp. 344. \$6.)
- TAYLOR, P. E. *The economics of public finance*. (New York: Macmillan. 1948. Pp. xxii, 618. \$4.50.)
- Facts and figures on government finance, 1948-49*. (New York: Tax Foundation. 1948. Pp. 143.)
- More state aid or more local taxes?* Forum pamph, no. 4. (New York: Tax Institute. 1948. Pp. 28. 50¢.)
- Recent trends in local taxes 1942-47*. Project note no. 23. (New York: Tax Foundation. 1948. Pp. 21.)
- A study of the federal budget for 1949, with proposed maximum expenditures in the fiscal year 1950*. By the Government Spending Committee of the Nat. Assoc. of Manufacturers. (New York: Nat. Assoc. of Manufacturers. 1948. Pp. 54.)

International Economics

- CHAMBERLAIN, L. H. and SNYDER, R. C. *American foreign policy*. (New York: Rinehart. 1948. Pp. 826.)
Selected readings with explanatory essays by the editors.
- FULTON, J. G. and JAVITS, J. K. *The International Trade Organization—an appraisal of the Havana Charter in relation to United States foreign policy, with a definitive study of its provisions*. Prepared for the House Committee on Foreign Affairs, 80th Cong., 2nd sess. (Washington: Supt. Docs. 1948. Pp. 120.)
- GAMBINO, A. *Gli ammodernamenti della teoria degli scambi internazionali*. (Padua: Casa Editrice Antonio Milani. 1946. Pp. 61.)
- GRAHAM, F. D. *The theory of international values*. (Princeton: Princeton Univ. Press. 1948. Pp. x, 349. \$5.)
- MARGOLD, S. K. *Let's do business with Russia—why we should and how we can*. (New York: Harper. 1948. Pp. ix, 244. \$3.50.)
A body of useful information concerning the opportunities and methods of trade with Russia.
- MEYER, F. V. *Britain's colonies in world trade*. (New York: Oxford Univ. Press. 1948. Pp. 297. \$6.)
- MOSSÉ, R. *Le système monétaire de Bretton Woods*. (Paris: Recueil Sirey. 1948. Pp. 153.)
- ORTIZ MARTIN, G. *Derecho internacional privado*. (San José: Univ. de Costa Rica. 1947. Pp. 522.)
- SMITH, R. E. *Customs valuation in the United States—a study in tariff administration*. (Chicago: Univ. of Chicago Press. 1948. Pp. xv, 380. \$7.50.)
- THOMASINE, Sister and others. *The International Trade Organization—a report by the Subcommittee on Economic Life*. (Washington: Catholic Assoc. for Internat. Peace. 1948. Pp. 32. 15¢.)
- WILCOX, C. *A charter for world trade*. (New York: Macmillan. 1949. Pp. xvii, 333. \$4.50.)
- WRIGHT, Q., editor. *The world community*. (Chicago: Univ. of Chicago Press. 1948. Pp. x, 323. \$5.)
A symposium on the possibility of effective world government. Papers presented by L. Wirth, M. Mead, K. E. Boulding, R. C. Angell, H. D. Lasswell, P. B. Potter, with

- discussion, at the Twenty-third Institute of the Norman Wait Harris Memorial Foundation, Highland Park, Ill., March, 1947.
- Balances of payments 1939-1945.* U.N. pub. 1947, 11, 1. (New York: Columbia Univ. Internat. Docs. Svce. 1948. Pp. 207. \$2.50.)
- Le continent américain et le déséquilibre mondial.* Study of the Centre d'Etudes de Politique Etrangère. (Paris: Lib. Marcel Riviere. 1948. Pp. 227. 280 fr.)
- A volume composed of contributions by M. Apchié, C. Bettelheim, P. W. Bidwell, W. Diebold, L. Buquet, M. Byé, M. A. Kriz, R. Marjolin, J. Piel, and J. Weiller.
- Foreign transactions of the U. S. government—basic data through June 30, 1948.* (Washington: Dept. of Commerce Off. of Bus. Econ. 1948. Pp. xiii, 30, A-118.)
- International approaches to problems of undeveloped areas.* Papers presented at the Round Table on Undeveloped Areas, 1947 annual conference of the Milbank Memorial Fund, Nov. 19-20, 1947. (New York: Milbank Memorial Fund. 1948. Pp. 76, 25¢.)
- Major problems of United States foreign policy 1948-49—a study guide.* (Washington: Brookings Institution. 1948. Pp. ix, 246. Paper, \$1.50; cloth, \$3.)
- Note on balance of payments statistics.* Report drawn up by the Sub-Committee on Balance of Payments Statistics of the League of Nations Committee of Statistical Experts. (New York: Columbia Univ. Press. 1948. Pp. 26. 25¢.)
- Operation of the trade agreements program, July 1934 to April 1948.* Prepared by the U. S. Tariff Commission in conformity with Executive Order, issued Feb. 25, 1947. (Washington: U. S. Tariff Commission. 1948.)
- The relation between international affairs and the traditional American scene.* Papers read at the annual meeting of the American Philosophical Society, April 22-23, 1948, the 1948 Penrose memorial lecture, and other papers. (Philadelphia: Am. Philosophical Society. 1948. Pp. 113. \$1.)
- Report—Ninth International Conference of American States, Bogotá, Colombia, March 30-May 2, 1948.* Pub. 3263. (Washington: Dept. of State. 1948. Pp. v, 317.)
- Selected publications and materials relating to American foreign policy, October, 1948.* Pub. 3304. (Washington: Dept. of State. 1948. Pp. iv, 26.)
- United States relations with international organizations.* Pt. 2, *A survey of the legislative activities of the Eightieth Congress.* Report of the subcommittee of the Senate Committee on Expenditures in the Executive Departments, pursuant to Pub. Law, 601, 79th Cong., Oct. 7, 1948. (Washington: Supt. Docs. 1948. Pp. 74.)

Business Administration

- BAER, J. B. and SAXON, O. G. *Commodity exchanges and futures trading—principles and operating methods.* (New York: Harper. 1949. Pp. xii, 324. \$5.)
- Published in a smaller edition in 1929 under the title *Commodity Exchanges*, by J. B. Baer and G. P. Woodruff.
- COCHRAN, T. C. *The Pabst Brewing Company—the history of an American business.* Bus. hist. ser. no. 1. (New York: New York Univ. Press. 1948. Pp. xii, 451. \$5.)
- CULLITON, J. W. *The management of marketing costs.* (Boston: Harvard Univ. Grad. School of Bus. Admin. 1948. Pp. 176. \$2.50.)
- GNEIB, J. E. *Practical production planning and control.* (New York: Funk & Wagnalls. 1948. Pp. 60.)
- LEVY, H. *The shops of Britain: a study of retail distribution.* (New York: Oxford Univ. Press. 1948. Pp. 253. \$4.50.)

- MERRILL, H. F., editor. *The responsibilities of business leadership*. (Cambridge: Harvard Univ. Press. 1948. Pp. 108. \$2.50.)
- METSCH, J. C. *Manufacturing control through standard costs*. (New York: Funk & Wagnalls. 1948. Pp. 64.)
- NEWLOVE, G. H. *Consolidated statements: including mergers and consolidations*. (Boston: Heath & Co. 1948. Pp. 412. \$7.)
- SEVIN, C. H. *How manufacturers reduce their distribution costs*. Dept. of Commerce econ. ser. no. 72. (Washington: Supt. Docs. 1948. Pp. vii, 151. 35¢.)
- TRUNDLE, G. T., Jr., and PECK, S. A., editors. *Managerial control of business*. Contributing editors, W. E. Savage, R. C. Trundle, R. P. Brooks, H. L. Wood, C. A. Hyre, C. O. Malpas, and A. Dangler, Jr. (New York: Wiley. London: Chapman and Hall. 1948. Pp. viii, 408. \$5.)
Contains sections on analyzing the company operation, general management problems, sales management, manufacturing and industrial relations.
- Availability of long-term credit for small business—hearings, 80th Cong., 2d sess., on H. R. 18, March 15-June 10, 1948, before House Select Committee on Small Business*. (Washington: Supt. Docs. 1948. Pp. iv, 353. 55¢.)
- Cost problems of today and tomorrow: the price level, break-even points, standard costs, sales forecasting and distribution costs*. Proceedings of the 29th International Cost Conference of the National Association of Cost Accountants, June, 1948. (New York: Nat. Assoc. of Cost Accountants. 1948. Pp. vi. 178.)
- New concepts in market management*. Marketing ser. no. 72. (New York: Am. Management Assoc. 1948. Pp. 27. 50¢.)
- Report of the Twentieth Boston Conference on Distribution, 1948*. Sponsored by the Retail Trade Board of the Boston Chamber of Commerce. (Boston: Boston Conf. on Distribution. 1948. Pp. 93.)
- Trade association opportunities in marketing research*. (Washington: Supt. Docs. 1948. Pp. 79. 25¢.)

Industrial Organization and Markets; Public Regulation of Business

- DUNCAN, D. J. *Trade association management—textbook for trade association management curriculum*. Rev. ed. (Chicago: Nat. Institute for Commercial and Trade Organization Executives. 1948. Pp. 190.)
- COTTON, B. *The war lords of Washington*. (New York: Harcourt, Brace. 1948. Pp. 313.)
- COWEE, J. W. *Federal regulation of insurance*. (Madison: Univ. of Wisconsin Bur. of Bus. Research and Service. Pp. 89. \$1.10.)
- EVANS, G. H., Jr. *Business incorporations in the United States 1800-1943*. (New York: Nat. Bur. Econ. Research. 1948. Pp. viii, 184. \$6.)
Primarily a statistical study of the number, character and size of incorporations.
- KAPLAN, A. D. H. *Small business: its place and problems*. CED research stud. (New York: McGraw-Hill. 1948. Pp. xiv, 281. \$3.25.)
- LOEVINGER, L. *The law of free enterprise; how to recognize and maintain the American economic system*. (New York: Funk & Wagnalls. 1949. Pp. 442. \$5.)
- NOURSE, E. G. *Economic implications of military preparedness*. Address before the Nat. Military Establishment Joint Orientation Conference, Nov. 10, 1948. (Washington: Council of Economic Advisers. 1948. Pp. 11.)
- ORD, L. C. *Politics and poverty*. (New York: Funk and Wagnalls. 1948. Pp. 188. \$3.)

- SCOTT, C. C., compiler and editor. *Petroleum industry committees in World War II, District V, 1941-46*. (San Francisco: Petroleum Industries Committee. 1947. Pp. 351.)
- THOMSON, C. A. H. *Overseas information service of the United States government*. (Washington: Brookings Institution. 1948. Pp. xii, 397. \$4.)
- WHITE, L. D. *Introduction to the study of public administration*. 3d ed. (New York: Macmillan. 1948. Pp. xvi, 612. \$5.75.)
- American economic and business policies*. Proceedings of a series of forums, 1945 and 1946. (New Wilmington, Pa.: Economic and Business Foundation. 1948. Pp. 328. \$5.)
- Decisions of Commissioner of Patents and of the United States Courts in patent and trademark cases*. Compiled from volumes 594 to 605 of the Official Gazette of the U. S. Patent Office during the year 1947. (Washington: Supt. Docs. 1948. Pp. 577. \$1.85.)
- The disposal of the aluminum plants*. Case stud. no. 1 of the Committee on Public Administration Cases, sponsored by Harvard, Syracuse, Cornell, and Princeton Universities. (Washington: Committee on Pub. Admin. Cases. 1948. Pp. 86.)
- Proceedings of the 8th International Congress for Scientific Management, Stockholm, 1947*. (Stockholm: Internat. Congress for Scientific Management. 1948. Pp. 746.)
- Report of Federal Trade Commission on international steel cartels*. (Washington: Supt. Docs. 1948. Pp. 115. 25¢.)
- The Truman program: addresses and messages by Harry S. Truman*. (Washington: Public Affairs Press. 1948. Pp. x, 261. \$2.95.)

Public Utilities; Transportation; Communications

- BOND, F. A. *Public regulation in action; a study of the experience of a Michigan gas company*. Govt. stud. no. 17. (Ann Arbor: Univ. of Michigan Press. 1948. Pp. 221. \$1.35.)
- FREDERICK, J. H. *Airport management*. (Chicago: Richard D. Irwin. 1949. Pp. xv, 316. \$4.)
- GREEN, C. J. *An analysis of the real cost of TVA power*. (Washington: Chamber of Commerce of the U. S. 1948. Pp. 91.)
- Aspects of United States participation in international civil aviation*. Dept. of State pub. 3209. (Washington: Dept. of State. 1948. Pp. iii, 108.)
- Federal legislation and regulations relating to highway construction, through July, 1947*. (Washington: Supt. Docs. 1948. Pp. 189. 40¢.)
- International telecommunication conferences, Atlantic City, N.J. May-Oct., 1947*. Dept. of State pub. 3177. (Washington: Supt. Docs. 1948. Pp. viii, 192. 40¢.)
- Investigation of Federal Communications Commission—hearings, 80th Cong., 2nd sess., pursuant to H. Res. 691 before Select Committee to Investigate the Federal Communications Commission*. Pt. 1, Aug. 5-Sept. 1, 1948. (Washington: Supt. Docs. 1948. Pp. 208.)

Industry Studies

- GRAHAM, H. D. *The economics of strip coal mining*. Bull. no. 66. (Urbana: Univ. of Illinois Bur. of Econ. and Bus. Research. 1948. Pp. 77.)
- LÖWEGREN, G. *Swedish iron and steel—a historical survey*. (Stockholm: Svenska Handelsbanken. 1948. Pp. 123.)
- British steel at Britain's service*. (London: The Labour Party. 1948. Pp. 15. 2d.)
- Cotton textile costs*. (New York: Cotton Textile Inst. 1948. Pp. 102. \$2.)
- Minerals yearbook, 1946*. Bur. of Mines pub. (Washington: Supt. Docs. 1948. Pp. 1629. \$3.75.)

Petroleum Committee record. 1st sess., Los Angeles, Feb., 1947. (Geneva: Internat. Lab. Off. 1948. Pp. v, 192.)

Steel supply and distribution problems. Individual views of Senator James E. Murray on the interim report of the Senate special committee to study problems of small business, 80th Cong., 2d sess. (Washington: Supt. Docs. 1948. Pp. 62.)

Land Economics; Agricultural Economics; Economic Geography

BLACK, J. D. and KIEFER, M. E. *Future food and agriculture policy, a program for the next ten years*. (New York: McGraw-Hill. 1948. Pp. 348.)

BRISCOE, V., MARTIN, J. W., and REEVES, J. E. *Safeguarding Kentucky's natural resources*. Bur. of Bus. Research and Bur. of Govt. Research bull. no. 14. (Lexington: Univ. of Kentucky Bur. of Bus. Research. 1948. Pp. x, 224.)

CHEW, A. P. *Plowshares into swords—agriculture in the world war age*. (New York: Harper. 1948. Pp. xv, 227. \$3.)

HIBBARD, B. H. *Agricultural economics*. (New York: McGraw-Hill. 1948. Pp. ix, 441. \$5.)

NELSON, L. *Can farmers afford to live better?* Planning pamph. no. 65. (Washington: Nat. Planning Assoc. 1948. Pp. viii, 31. 50¢.)

DE ROOS, R. W. *The thirsty land; the story of the Central Valley project*. (Stanford: Stanford Univ. Press. 1948. Pp. 265.)

STODDARD, C. H. *Forest farming and rural employment—a study of two areas in northern Wisconsin and southwestern Arkansas*. (Washington: Charles Lathrop Pack Forestry Foundation. 1949. Pp. 29.)

WAITE, W. C. and TRELOGAN, H. C. *Introduction to agricultural prices*. (Minneapolis: Burgess Pub. Co. 1948. Pp. iii, 227. \$4.)

1949 agricultural outlook charts. Prepared by the Dept. of Agriculture. (Washington: Supt. Docs. 1948. Pp. 90. 45¢.)

Crops and markets, January 1948. An annual report supplementing *Agricultural Statistics*, publication of the Dept. of Agriculture, with additional statistics prepared by the Bureau of Agricultural Economics. (Washington: Supt. Docs. 1948. Pp. 120. 45¢.)

European programs of agricultural reconstruction and development. Pub. of U. N. Food and Agriculture Organization. (New York: Columbia Univ. Press. 1948. Pp. 68. \$1.)

Housing and employment. ILO stud. and rept., new ser., no. 8. (Washington: Internat. Lab. Office. 1948. Pp. iv, 147. 75¢.)

Report of the FAO mission to Poland. Pub. of the U. N. Food and Agriculture Organization. (New York: Columbia Univ. Press. 1948. Pp. 159. \$2.)

The state of food and agriculture, 1948—a survey of world conditions and prospects. F.A.O. pub. (New York: Columbia Univ. Internat. Docs. Svce. 1948. Pp. 215. \$2.)

Sugar—facts and figures. (New York: U. S. Cuban Sugar Council. 1948. Pp. 159.)

Labor

BAKER, H. *Company-wide understanding of industrial relations policies—a study in communications*. Research rept. no. 78. (Princeton: Princeton Univ. Industrial Relations Sec. 1948. Pp. 79. \$2.)

BAKKE, E. W. and KERR, C. *Manual to accompany "Unions, Management, and the Public."* (New York: Harcourt, Brace. 1948. Pp. 30. 40¢.)

BARNES, R. M. *Motion and time study*. 3d ed. (New York: John Wiley. London: Chapman & Hall. 1949. Pp. xii, 559. \$5.)

- DANKERT, C. E. *Contemporary unionism in the United States*. Indus. relations and personnel ser. (New York: Prentice-Hall. 1948. Pp. xv, 521. \$5.)
- DAUGHERTY, C. R. *Labor problems in American industry*. New impression. (Boston: Houghton Mifflin. 1948. Pp. xxii, 1066, xiv. \$5.)
Contains a supplementary chapter to the 1941 edition on "War and post-war labor conditions" pending thoroughgoing revision of the textbook which is now under way.
- GIBSON, R. *Cotton textile wages in the United States and Great Britain—a comparison of trends, 1860-1945*. (New York: King's Crown Press. 1948. Pp. 137. \$2.50.)
- GOLLUB, M. *Discharge for cause—a study of arbitration awards in cases of the New York State Board of Mediation, 1937-1946*. Div. of Research and Stat. spec. bull. no. 221. (New York: N. Y. State Dept. of Labor. 1948. Pp. viii, 88.)
- HERON, A. R. *Beyond collective bargaining*. "Toward understanding in industry" ser. (Palo Alto: Stanford Univ. Press. 1948. Pp. vii, 214. \$2.75.)
- KUCZYNSKI, J. *Die theorie der lage der arbeiter*. (Berlin: Die Freie Gewerkschaft Verlagsgesellschaft. 1948. Pp. 308.)
- LANG, L. R. *Tomorrow is beautiful*. (New York: Macmillan. 1948. Pp. 303. \$3.50.)
Reminiscences by an active participant in the history of the labor movement.
- LESTER, R. A. *Company wage policies—a survey of patterns and experience*. (Princeton: Princeton Univ. Indus. Relations Sec. 1948. Pp. 45. \$1.50.)
- MACDONALD, L. *Selection and tenure of arbitrators in labor disputes*. (New York: New York Univ. Grad. Div. for Training in Pub. Svce. 1948. Pp. 51.)
- MILLER, G. W. *American labor and the government*. (New York: Prentice-Hall. 1948. Pp. xiv, 638. \$5.50.)
- PLANTY, E. G., MCCORD, W. S., and EPPERSON, C. A. *Training employees and managers for production and teamwork*. (New York: Ronald Press. 1948. Pp. xiii, 278. \$5.)
- REYNOLDS, L. G., and SHISTER, J. *Job horizons—a study of job satisfaction and labor mobility*. Yale Labor and Management ser. (New York: Harper. 1948. Pp. x, 102. \$2.25.)
- SPERO, S. D. *Government as employer*. (New York: Remsen Press. 1948. Pp. ix, 497.)
- TAYLOR, G. W. *Government regulation of industrial relations*. (New York: Prentice-Hall. 1948. Pp. xii, 383. \$4.)
- YODER, D. *Demands for labor: opportunities for research*. Pamph. no. 7. (New York: Soc. Sci. Research Council. 1948. Pp. vi, 40.)
- . *Personnel management and industrial relations*. 3d ed. (New York: Prentice-Hall. 1948. Pp. 905. \$6.65; text ed., \$5.)
- Causes of industrial peace under collective bargaining*.
Case stud. no. 2, *The Libbey-Owens-Ford Glass Company and the Federation of Glass, Ceramic and Silica Sand Workers of America*, by F. H. Harbison and K. Carr. (Washington: Nat. Planning Assoc. 1948. Pp. xii, 61. \$1.)
Case stud. no. 3, *The Dewey and Almy Chemical Company and the International Chemical Workers Union*, by D. McGregor and J. N. Scanlon. (Washington: Nat. Planning Assoc. 1948. Pp. xii, 85. \$1.)
- Directory of labor unions in the United States*. (Washington: Supt. Docs. 1948. Pp. 64. 20¢.)
- Glossary of industrial relations terminology*. Indus. Relations Center pub. no. 6. (Minneapolis: Univ. of Minn. Press. 1948. Pp. 28. 75¢.)
- Labor-management relations—hearings on operations of Labor-Management Relations Act, 1947, 80th Cong., 2d sess., before the Joint Committee on Labor-Management Relations*

Pt. 1-2, May 24-June 12, 1948. (Washington: Supt. Docs. 1948, Pp. x, 1272. Pt. 1, \$1.25; Pt. 2, \$1.50.)

Record of proceedings, 29th session, International Labour Conference, Montreal, 1946. (Montreal: Internat. Lab. Off. 1948. Pp. xxxvii, 648.)

Report to the CIO by Philip Murray, president, at the tenth constitutional convention, Portland, Oregon, Nov. 22-26, 1948. (Washington: Congress of Indus. Organizations. 1948. Pp. 107.)

Wage rates and hours of labour in Canada 1947. Dept. of Labour rept. no. 30. (Ottawa: E. Cloutier. 1948. Pp. 101.)

Population; Social Welfare and Living Standards

BACHMAN, G. W. and MERIAM, L. *The issue of compulsory health insurance.*

A study prepared at the request of Senator H. Alexander Smith, chairman of the Subcommittee on Health of the Senate Committee on Labor and Public Welfare. (Washington: Brookings Institution. 1948. Pp. 271.)

HABER, W. and COHEN, W. J. *Readings in social security.* (New York: Prentice-Hall. 1948. Pp. xix, 634. \$5.75.)

SCHIBSBY, M. *International migration and one world.* (New York: Nat. Committee on Immigration Policy. 1948. Pp. 107. 25¢.)

Second session of the Permanent Migration Committee. ILO stud. and rept. new ser. no. 10. (Washington: Internat. Lab. Off. 1948. Pp. 172. \$1.)

Unclassified Items

BONN, M. J. *Wandering scholar.* (New York: John Day. 1948. Pp. 403. \$5.)

URWICK, E. J. *The values of life.* Edited with an introductory essay on his social philosophy by J. A. Irving. (Toronto: Univ. of Toronto Press. 1948. Pp. lxx, 237. \$3.50.)

PERIODICALS

Economic Theory; General Economics

- APEL, H. *Marginal cost constancy and its implications*. Am. Econ. Rev., Dec., 1948. Pp. 16.
- BRAY, F. S. *The nature of income and capital*. Accounting Research, Nov., 1948. Pp. 23.
- DILLARD, D. *The Keynesian revolution and economic development*. A review article. Jour. Econ. Hist., Nov., 1948. Pp. 78.
- DOMAR, E. D. *The problem of capital accumulation*. Am. Econ. Rev., Dec., 1948. Pp. 18.
- DU WORS, R. E. *The markets and the mores: economics and sociology*. Soc. Forces, Dec., 1948. Pp. 9.
- EITEMAN, W. J. *The least cost point, capacity, and marginal analysis: a rejoinder*. Am. Econ. Rev., Dec., 1948. Pp. 5.
- FOURASTIE, J. *La formation des prix en période de progrès technique*. Rev. d'Econ. Pol., July-Aug., 1948. Pp. 12.
- GARVY, G. *The role of dissaving in economic analysis*. Jour. Pol. Econ., Oct., 1948. Pp. 12.
- GRAMPP, W. D. *On the politics of the classical economists*. Quart. Jour. Econ., Nov., 1948. Pp. 34.
- HAWKINS, D. *Some conditions of macroeconomic stability*. Econometrica, Oct., 1948. Pp. 14.
- HOOD, W. C. *Some aspects of the treatment of time in economic theory*. Canadian Jour. Econ. and Pol. Sci., Nov., 1948. Pp. 16.
- HOOVER, C. B. *Keynes and the economic system*. Jour. Pol. Econ., Oct., 1948. Pp. 11.
- JOHNSON, H. G. *An error in Ricardo's exposition of his theory of rent*. Quart. Jour. Econ., Nov., 1948. Pp. 2.
- LACHMAN, L. M. *Investment repercussions*. Quart. Jour. Econ., Nov., 1948. Pp. 27.
- MAGAUD, C. *Recherche des effets d'une hausse des prix sur la structure de la production*. Rev. d'Econ. Pol., July-Aug., 1948. Pp. 19.
- MARCHAL, A. *De la théorie à la prévision par la méthode des modèles*. Rev. d'Econ. Pol., July-Aug., 1948. Pp. 31.
- MERTON, R. K. *The bearing of empirical research upon the development of social theory*. Am. Soc. Rev., Oct., 1948. Pp. 11.
- PICOU, A. C. *A comment on duopoly*. Economica, Nov., 1948. Pp. 5.
- REDFIELD, R. *The art of social science*. Am. Jour. Sociology, Nov., 1948. Pp. 10.
- SALIN, E. *Wirtschaft und wirtschaftslehre nach zwei welthriegen*. Kyklos, Vol. I, Fasc. 1, 1947. Pp. 31.
- SAMUELSON, P. A. *Consumption theory in terms of revealed preference*. Economica, Nov., 1948. Pp. 11.
- TOBIN, J. *The fallacies of Lord Keynes' "General Theory"; comment*. With reply by J. Rueff. Quart. Jour. Econ., Nov., 1948. Pp. 20.
- TURNERY, R. *The multiplier*. Economica, Nov., 1948. Pp. 11.
- VICKREY, W. *Limitations of Keynesian economics*. Soc. Research, Dec., 1948. Pp. 14.

Economic History; National Economies

- ARAKELIAN, A. *La direzione della grande produzione industriale dell'U.R.S.S.* Critica Econ., July-Aug., 1948. Pp. 21.
- DORFMAN, A. *Latin American economic problems and international co-operation*. Internat. Lab. Rev., Nov., 1948. Pp. 24.
- JOHNSON, A. *The economic position of Israel*. Soc. Research, Dec., 1948. Pp. 8.
- KLEIN, L. R. *Planned economy in Norway*. Am. Econ. Rev., Dec., 1948. Pp. 20.

- MORGAN, A. D. *The Japanese war economy: a review*. Far East. Quart., Nov., 1948. Pp. 8.
- MORRIS, M. *Chartism and the British working-class movement*. Sci. and Soc., Fall, 1948. Pp. 18.
- RAPPARD, W. E. *The economic position of Switzerland*. Lloyds Bank Rev., Jan., 1949. Pp. 16.
- SARC, Ö. C. *Economic policy of the new Turkey*. Middle East Jour., Oct., 1948. Pp. 17.
- SCHWARTZ, H. *Soviet postwar industrial production*. Jour. Pol. Econ., Oct., 1948. Pp. 4.
- Collective farming in the U.S.S.R.: postwar consolidation of control*. World Today, Nov., 1948. Pp. 11.
- Land reform in Hungary*. World Today, Jan., 1949. Pp. 7.
- The Philippine Islands—economic problems of independence*. World Today, Nov., 1948. Pp. 9.

Statistics and Econometrics

- BARTLETT, M. S. *A note on the statistical estimation of supply and demand relations from time series*. Econometrica, Oct., 1948. Pp. 7.
- TINTNER, G. *Homogeneous systems in mathematical economics*. Econometrica, Oct., 1948. Pp. 22.
- VERHULST, M. J. J. *The pure theory of production applied to the French gas industry*. Econometrica, Oct., 1948. Pp. 14.

Economic Systems; Planning and Reform; Cooperation

- ATKINSON, F. J. *Saving and investment in a socialist state*. Rev. Econ. Stud., No. 38, 1947-48. Pp. 6.
- BRAND, LORD. *Private enterprise and socialism*. Econ. Jour., Sept., 1948. Pp. 16.
- DEWEY, D. J. *Notes on the analysis of socialism as a vocational problem*. Manchester School, Sept., 1948. Pp. 20.
- DOBB, M. *Il dibattito sul calcolo economico in una economia socialista*. Critica Econ., July-Aug., 1948. Pp. 12.
- FAUQUET, G. *The economic and legal status of co-operative institutions*. Internat. Lab. Rev., Oct., 1948. Pp. 14.
- FINER, H. *The central planning system in Britain*. Pub. Admin. Rev., Autumn, 1948. Pp. 13.
- KNIGHT, F. H. *Professor Heimann on religion and economics*. Jour. Pol. Econ., Dec., 1948. Pp. 18.
- PESENTI, A. *Considerazioni sui presupposti della economia pianificata*. Critica Econ., July-Aug., 1948. Pp. 19.
- POLANYI, M. *Planning and spontaneous order*. Manchester School, Sept., 1948. Pp. 32.
- TAYLOR, O. H. *The economics of a "free" society: four essays*. Quart. Jour. Econ., Nov., 1948. Pp. 30.
- TINBERGEN, J. *Central planning in the Netherlands*. Rev. Econ. Stud., No. 38, 1947-48. Pp. 8.
- WARD, B. *Limits of economic planning*. For. Affairs, Jan., 1949. Pp. 17.

National Income and Social Accounting

- BONNELL, E. T. *Public and private debt in 1947*. Survey Current Bus., Oct., 1948. Pp. 4.
- DENISON, E. F. *Industrial composition of national income*. Survey Current Bus., Dec., 1948. Pp. 7.
- DENNISON, S. R. *Industrial productivity*. Lloyds Bank Rev., Jan., 1949. Pp. 17.
- FRANZSEN, D. G. *Some methodological problems raised by the calculation of the Union's national income, by income type*. South African Jour. Econ., June, 1948. Pp. 11.
- KLEIN, L. R. and RUBIN, H. *A constant-utility index of the cost of living*. Rev. Econ. Stud., No. 38, 1947-48. Pp. 4.

- RAVENSCHROFT, A. P. *National accounts and national income*. Memorandum No. 2, *Union government public debt and interest*. South African Jour. Econ., Sept., 1948. Pp. 10.
- SEERS, D. *The national product before and after the war*. Bull. Oxford Univ. Inst. Statistics, Oct., 1948. Pp. 23.
- TRESS, R. C. *The diagrammatic representation of national income flows*. *Economica*, Nov., 1948. Pp. 13.
- WINSTON, C. and SMITH, M. A. *Retail sales and consumer income*. Survey Current Bus., Oct., 1948. Pp. 8.

Business Fluctuations; Prices

- AMES, E. *A theoretical and statistical dilemma—the contributions of Burns, Mitchell, and Frickey to business-cycle theory*. *Econometrica*, Oct., 1948. Pp. 23.
- BACKMAN, J. *Price inflexibility—war and postwar*. Jour. Pol. Econ., Oct., 1948. Pp. 10.
- BRONFENBRENNER, M. *Postwar political economy: the President's reports*. Jour. Pol. Econ., Oct., 1948. Pp. 19.
- DOBRETSBERGER, J. *A critical review of the discussions on full-employment*. *Kyklos*, Vol. I, Fasc. 1, 1947. Pp. 7.
- FISHER, A. G. B. *Less stabilisation: more stability*. *Kyklos*, Vol. I, Fasc. 1, 1947. Pp. 18.
- KRAVIS, I. B. and RITTER, A. S. *World prices, 1948 compared with 1939*. Mo. Lab. Rev., Nov., 1948. Pp. 9.
- DI NARDI, G. *Expenditure of the "Lire Fund" for anti-cyclical purposes*. Rev. Econ. Conditions in Italy, Nov., 1948. Pp. 9.
- PAISH, F. W. *Savings and investment*. Westminster Bank Rev., Nov., 1948. Pp. 8.
- RÖPKE, W. *Offene und zurückgestaute inflation*. *Kyklos*, Vol. I, Fasc. 1, 1947. Pp. 15.
- SCHUMANN, C. G. W. *Aspects of the problem of full employment in South Africa*. South African Jour. Econ., June, 1948. Pp. 18.
- SNIDER, J. L. *What's ahead for prices and business?* Harvard Bus. Rev., Nov., 1948. Pp. 10.
- WARBURTON, C. *Bank reserves and business fluctuations*. Jour. Am. Stat. Assoc. Dec., 1948. Pp. 12.
- WRIGHT, D. McC. *Inflation and equality*. Am. Econ. Rev., Dec., 1948. Pp. 7.

Money and Banking; Short-Term Credit; Consumer Finance

- DE RIDDER, V. A. *The Belgian monetary reform*. Rev. Econ. Stud., No. 38, 1947-48. Pp. 19.
- PINTO BARBOSA, A. M. *Velocidade de circulação*. Indústria Portuguesa, Apr., 1948. Pp. 11.
- SAILOR, V. L. *Bank supervision and the business cycle*. Jour. Finance, Oct., 1948. Pp. 13.
- THIRLBY, G. F. *Demand and supply of money*. Econ. Jour., Sept., 1948. Pp. 25.
- Bank credit developments*. Fed. Res. Bull., Oct., 1948. Pp. 12.
- Credit developments and the government security market*. Fed. Res. Bull., Dec., 1948. Pp. 8.
- The Italian banking system—institutes for medium and long-term investments*. Rev. Econ. Conditions in Italy, Nov., 1948. Pp. 5.

Business Finance; Investments and Security Markets; Insurance

- DULAN, H. A. *Common-stock investment as an inflation hedge, 1939-46*. Jour. Bus. Univ. Chicago, Oct., 1948. Pp. 9.
- FERGUSON, D. A. *The Industrial Development Bank of Canada*. Jour. Bus. Univ. Chicago, Oct., 1948. Pp. 16.
- HART, O. *Risk factors in public utility securities*. Jour. Finance, Oct., 1948. Pp. 13.
- JACOBY, N. H. *The demand for funds by American business enterprises*. Jour. Finance, Oct., 1948. Pp. 12.

JONES,
MILLER,
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- JONES, H. *The flow of savings—I*. Jour. Finance, Oct., 1948. Pp. 26.
- MILLER, S. L. *The equity capital problem*. Harvard Bus. Rev., Nov., 1948. Pp. 9.
- NERLOVE, S. H. *Common stocks as investments for American life insurance companies, a non-academic view—I*. Jour. Finance, Oct., 1948. Pp. 13.

Public Finance

- BRAY, F. S. and STONE, R. *The presentation of the central government accounts*. Accounting Research, Nov., 1948. Pp. 12.
- BURKHEAD, J. V. *Federal budgetary developments, 1947-48*. Pub. Admin. Rev., Autumn, 1948. Pp. 8.
- CHAMBERS, S. P. *Taxation and the supply of capital for industry*. Lloyds Bank Rev., Jan., 1949. Pp. 20.
- CLARK, R. M. *The municipal business tax in Canada*. Canadian Jour. Econ. and Pol. Sci., Nov., 1948. Pp. 11.
- CLUSEAU, M. *Can taxation and borrowing be assimilated as sources of finance?* In French with English summary. Openbare Financiën, Vol. III, No. 4, 1948. Pp. 17.
- CRIZIOTTI, B. *Prospects of public finances in Italy*. Rev. Econ. Conditions in Italy, Sept., 1948. Pp. 9.
- JACOBSSON, P. *Le financement de la guerre en Allemagne*. Kyklos, Vol. I, Fasc. 1, 1947. Pp. 26.
- KOZÁK, J. *Czechoslovak budget economy after the war*. Summary in French. Openbare Financiën, Vol. III, No. 4, 1948. Pp. 19.
- MUSGRAVE, R. A. and THIN, T. *Income tax progression, 1929-48*. Jour. Pol. Econ., Dec., 1948. Pp. 17.
- RATCHFORD, B. U. *The economics of public debts*. Summary in French. Openbare Financiën, Vol. III, No. 4, 1948. Pp. 14.
- SHERE, L. *Taxation and inflation control*. Am. Econ. Rev., Dec., 1948. Pp. 14.
- SOLOMON, M. D. *The Revenue Act of 1948: federal estate and gift taxation*. Michigan Law Rev., Dec., 1948. Pp. 22.
- STEWART, A. and HANSON, E. J. *Some aspects of rural municipal finance*. Canadian Jour. Econ. and Pol. Sci., Nov., 1948. Pp. 10.
- UGO PAPI, G. *Aspects of post-war finance*. In French with English summary. Openbare Financiën, Vol. III, No. 4, 1948. Pp. 19.

International Economics

- ARNOW, P. *ITO: employment and economic development*. Mo. Lab. Rev., Nov., 1948. Pp. 7.
- BALDWIN, R. E. *Equilibrium in international trade: a diagrammatic analysis*. Quart. Jour. Econ., Nov., 1948. Pp. 15.
- BEAN, R. W. *European multilateral clearing*. Jour. Pol. Econ., Oct., 1948. Pp. 13.
- BEYEN, J. W. *The International Bank for Reconstruction and Development*. Internat. Affairs, Oct., 1948. Pp. 9.
- CÉPÈDE, M. *Les institutions économiques et sociales internationales, III. L'organisation des nations unies pour l'alimentation et l'agriculture*. Rev. d'Econ. Pol., July-Aug., 1948. Pp. 22.
- CLEVELAND, H. *Economic aid to China*. Far East. Survey, Jan. 12, 1949. Pp. 6.
- HARTLEY, SIR HAROLD. *Limiting factors in world development, or what is possible?* South African Jour. Econ., Sept., 1948. Pp. 14.
- HIRSCHMAN, A. O. *Disinflation, discrimination, and the dollar shortage*. Am. Econ. Rev., Dec., 1948. Pp. 6.

- HUTCHESON, H. H. *Problems of the underdeveloped countries*, II. For. Policy Report, Oct. 1, 1948. Pp. 10.
- IMLAH, A. H. *Real values in British foreign trade, 1798-1853*. Jour. Econ. Hist., Nov., 1948. Pp. 20.
- KAHN, A. E. *The burden of import duties: comment*. With rejoinder by E. R. Rolph. Am. Econ. Rev., Dec., 1948. Pp. 13.
- MARTIN, K. and THACKERAY, F. G. *The terms of trade of selected countries, 1870-1938*. Bull. Oxford Univ. Inst. Stat., Nov., 1948. Pp. 22.
- MCCURRACH, D. F. *Britain's U. S. dollar problems 1939-45*. Econ. Jour., Sept., 1948. Pp. 17.
- PARMELEE, R. C. *Foreign transactions of the U. S. government in fiscal year 1948*. Survey Current Bus., Nov., 1948. Pp. 6.
- SADIE, J. L. *Further observations on foreign exchange rates*. South African Jour. Econ., June, 1948. Pp. 8.
- SALTER, SIR ARTHUR. *European recovery: a look ahead*. For. Affairs, Jan., 1949. Pp. 13.
- SAMMONS, R. L. *International transactions by major foreign areas*. Survey Current Bus., Nov., 1948. Pp. 5.
- SCHWOB, P. *Réflexions sur la crise de l'économie mondiale*. Rev. d'Econ. Pol., July-Aug., 1948. Pp. 38.
- SUBRAHMANYAM, A. N. *India's trade and payments after partition*. India Quart., July-Sept., 1948. Pp. 7.
- The Franco-Italian customs union*. World Today, Nov., 1948. Pp. 7.
- International transactions of the United States during the third quarter 1948*. Survey Current Bus., Dec., 1948. Pp. 3.
- Policies and activities of the International Monetary Fund, 1947-48*. Fed. Res. Bull., Oct., 1948. Pp. 4.
- Rumanian oil: nationalization and foreign interests*. World Today, Jan., 1949. Pp. 8.

Business Administration

- ALDERSON, W., and COX, R. *Towards a theory of marketing*. Jour. Marketing, Oct., 1948. Pp. 16.
- BAILEY, G. D. *Concepts of income*. Harvard Bus. Rev., Nov., 1948. Pp. 13.
- . *Relationship of accounting to other factors in reporting inflationary income*. Jour. Accountancy, Nov., 1948. Pp. 9.
- BRIDGE, L. *Capital requirements of new trade firms*. Survey Current Bus., Dec., 1948. Pp. 7.
- HARRISON, G. C. *The practical economist's profit and loss statement*. N.A.C.A. Bull., Sec. 1, Dec. 15, 1948. Pp. 14.
- HENRY, W. E. *The business executive: the psychodynamics of a social role*. Am. Jour. Sociology, Jan., 1949. Pp. 6.
- LEARNED, E. P. *Pricing of gasoline: a case study*. Harvard Bus. Rev., Nov., 1948. Pp. 34.
- LITTLE, L. T. *Replacement costs—an economist's view*. Accounting Research, Nov., 1948. Pp. 21.
- MAY, G. O. *Accounting research*. Accounting Research, Nov., 1948. Pp. 7.
- PARADISO, L. J. *Significance of inventories in the current economic situation*. Jour. Am. Stat. Assoc., Sept., 1948. Pp. 16.
- PEDEN, R. W. *Pricing policies and the awareness of costs*. N.A.C.A. Bull., Sec. 1, Dec. 1, 1948. Pp. 8.
- SCHREIER, F. T. and WOOD, H. J. *Motivation analysis in market research*. Jour. Marketing, Oct., 1948. Pp. 11.
- STOCK, J. S. and HOCHSTIM, J. R. *Commercial uses of sampling*. Jour. Am. Stat. Assoc., Dec., 1948. Pp. 14.

Industrial Organization and Markets; Public Regulation of Business

- BARNARD, R. C. and ZLINKOFF, S. S. *Patents, procedure and the Sherman Act—the Supreme Court and a competitive economy*. George Washington Law Rev., Dec., 1948. Pp. 58.
- BLISS, C. A. *Some field notes on freight absorption*. Harvard Bus. Rev., Nov., 1948. Pp. 15.
- EDWARDS, C. D. *The effect of recent basing point decisions upon business practices*. Am. Econ. Rev., Dec., 1948. Pp. 15.
- FETTER, F. A. *Exit basing point pricing*. Am. Econ. Rev., Dec., 1948. Pp. 13.
- GEORGE, E. B. *The law and economics of basing points*. Dun's Rev. Pt. II, Oct., 1948. Pt. III, Nov., 1948. Pp. 4; 3.
- HEAD, N. C. *The basing point cases*. Harvard Bus. Rev., Nov., 1948. Pp. 15.
- MAYER, J. *Observations sur les subventions économiques*. Rev. d'Econ. Pol., July-Aug., 1948. Pp. 11.
- McKEAGE, E. C. *Due process concept under administrative law*. Pub. Utilities Fortnightly, Dec. 2, 1948. Pp. 7.
- DE NEUMAN, A. M. *Real economies and the balance of industry*. Econ. Jour., Sept., 1948. Pp. 12.
- SCHWEITZER, A. *Must rearmament lead to regulation?* Jour. Bus. Univ. Chicago, Oct., 1948. Pp. 11.
- WIMPERIS, H. E. *Atomic energy control: the present position*. Internat. Affairs, Oct., 1948. Pp. 9.

Public Utilities; Transportation; Communications

- ADELMAN, M. A. *Interest rates and fair return*. Land Econ., Nov., 1948. Pp. 12.
- CURRIE, A. W. *Freight rates and regionalism*. Canadian Jour. Econ. and Pol. Sci., Nov., 1948. Pp. 14.
- DESSUS et FLEURQUIN. *Les tarifs du gaz et de l'électricité et l'orientation du consommateur*. Rev. d'Econ. Pol., July-Aug., 1948. Pp. 34.
- DONNELLY, J. L. *The New York St. Lawrence public power project*. Pub. Utilities Fortnightly, Nov. 18, 1948. Pp. 12.
- MARX, D., JR. *Current American ship-operating subsidies*. Jour. Bus. Univ. Chicago, Oct., 1948. Pp. 21.
- MOFFAT, R. E. *Some aspects of recent freight rate discussions*. Canadian Jour. Econ. and Pol. Sci., Nov., 1948. Pp. 12.
- RHYNE, C. S. *International law and air transportation*. Michigan Law Rev., Nov., 1948. Pp. 26.
- VIRTUE, G. O. *The federal coordinator's investigation of common carrier subsidies*. Land Econ., Nov., 1948. Pp. 18.

Industry Studies

- VOSKUIL, W. H. *Multiple fuel needs of the American economy*. Land Econ., Nov., 1948. Pp. 14.

Land Economics; Agricultural Economics; Economic Geography

- COLEAN, M. L. *What is back of to-day's building costs?* Dun's Rev., Nov., 1948. Pp. 3.
- DRUMMOND, W. M. *Objectives and methods of government pricing of farm products*. Jour. Farm Econ., Nov., 1948. Pp. 15.
- HARDIN, C. M. *Current proposals for the organization of conservation and land-use programs in agriculture, the United States*. Jour. Farm Econ., Nov., 1948. Pp. 26.
- . *Reflections on agricultural policy formation in the United States*. Am. Pol. Sci. Rev., Oct., 1948. Pp. 25.

- HEADY, E. O. *The economics of rotations with farm and production policy applications*. Jour. Farm Econ., Nov., 1948. Pp. 20.
- LEPAWSKY, A. *Government planning in the South*. Jour. Politics, Aug., 1948. Pp. 32.
- MURRAY, K. A. H. *British agriculture: IV, The outlook for British agriculture*. Lloyds Bank Rev., Jan., 1949. Pp. 20.
- ROSENBAUM, D. *The housing needs of the nonwhite population in nonfarm areas*. Land Econ., Nov., 1948. Pp. 9.
- THARP, M. M. *A reappraisal of farm tenure research*. Land Econ., Nov., 1948. Pp. 16.
- WITTAUSCH, W. K. *Marketing prefabricated houses*. Harvard Bus. Rev., Nov., 1948. Pp. 13.

Labor

- BRISSENDEN, P. F. and KEATING, J. M. *Union-management co-operation in millinery manufacturing in the New York metropolitan area*. Indus. and Lab. Rel. Rev., Oct., 1948. Pp. 30.
- DEWEY, D. J. *Occupational choice in a collectivist economy*. Jour. Pol. Econ., Dec., 1948. Pp. 15.
- DUBIN, R. *Decision-making by management in industrial relations*. Am. Jour. Sociology, Jan., 1949. Pp. 6.
- DUBINSKY, D. *Rift and realignment in world labor*. For. Affairs, Jan., 1949. Pp. 14.
- FISHER, M. J. *Equal pay for equal work legislation*. Indus. and Lab. Rel. Rev., Oct., 1948. Pp. 8.
- FLEXNER, J. A. *British labor under the labor government: Pt. II, Position and role of trade-unions*. Mo. Lab. Rev., Oct., 1948. Pp. 7.
- HAUSER, P. M. *The labor force and gainful workers—concept, measurement, and comparability*. Am. Jour. Sociology, Jan., 1949. Pp. 18.
- HORST, S. T. V. D. *The industrial council system and the community*. South African Jour. Econ., Sept., 1948. Pp. 12.
- LINDBLOM, C. E. *The union as a monopoly*. Quart. Jour. Econ., Nov., 1948. Pp. 27.
- ROSS, L. *Conciliation and arbitration in Australia and New Zealand: recent developments in Australian industrial relations*. Indus. and Lab. Rel. Rev., Oct., 1948. Pp. 7.
- SCANLON, J. N. *Profit sharing under collection bargaining: three case studies*. Indus. and Lab. Rel. Rev., Oct., 1948. Pp. 18.
- SHEPARD, H. A. *Democratic control in a labor union*. Am. Jour. Sociology, Jan., 1949. Pp. 6.
- SIMONS, G. *Economic and legal aspects of profit-sharing plans*. Indus. and Lab. Rel. Rev., Oct., 1948. Pp. 14.
- STURMTHAL, A. *National patterns of union behavior*. Jour. Pol. Econ., Dec., 1948. Pp. 12.
- TURNBULL, J. G. *The small business enterprise and the management prerogative issue*. Indus. and Lab. Rel. Rev., Oct., 1948. Pp. 17.
- WOOL, H. and LEWIS, H. L. *Manpower needs of the expanded defense program*. Mo. Lab. Rev., Oct., 1948. Pp. 4.
- The I.L.O. and the problem of freedom of association and industrial relations*. Internat. Lab. Rev., Nov., 1948. Pp. 26.

Population; Social Welfare and Living Standards

- BORRIE, W. D. *Aspects historiques et contemporains de l'immigration australienne*. Population, July-Sept., 1948. Pp. 18.
- LEMIEUX, O. A. *Problems in census taking*. Canadian Jour. Econ. and Pol. Sci., Nov., 1948. Pp. 12.
- SCHULZ, T. *Family expenditure in 1947. Pt. I: Income and expenditure on non-food items*. Bull. Oxford Univ. Inst. Stat., Nov., 1948. Pp. 20.
- TAGLIACARNE, G. *La situation démographique de l'Italie*. Population, July-Sept., 1948. Pp. 8.

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NOTES

The following have been appointed members of the American Economic Association nominating committee for the current year: Simeon E. Leland, Northwestern University Chairman, James K. Hall, University of Washington, Margaret G. Reid, University of Illinois, Lloyd G. Reynolds, Yale University, Edward C. Simmons, Duke University, and Wolfgang F. Stolper, Swarthmore College. The chairman of this committee would appreciate receiving any suggestions for officers for next year as soon as possible.

The Sixty-second Annual Meeting will be held in New York City, December 27-30, 1949, with headquarters at Hotel Commodore. President Howard S. Ellis, of the University of California, would be glad to have suggestions from the members of the Association with regard to subjects for the program and persons qualified to present them.

BOOKS AND JOURNALS FOR EUROPEAN ECONOMISTS

Miss Mabel Newcomer, chairman of the Committee for Providing Aid to European Scholars, reports that there are many unsatisfied requests for books and copies of economic journals by libraries and universities. She requests that members of the Association make further contributions of books and journals as soon as possible. They should be sent to her, Department of Economics, Vassar College, Poughkeepsie, N.Y.

Necrology

Bernardo Cevallos, Date not known.

Fred E. Clark, November 26, 1948.

Bert C. Fuller, March 29, 1948.

William A. Frame, December 21, 1948.

Charles W. Gerstenberg, September 15, 1948.

Thomas W. Lamont, February 2, 1948.

James McC. Mitchell, October 14, 1948.

Gerald Morgan, October 13, 1948.

Homer N. Sweet, May 18, 1948.

Appointments and Resignations

Charles W. Anrod has been appointed associate professor of economics at Loyola University, Chicago, Illinois.

Frederick C. Armstrong has been appointed instructor in economics at Michigan State College.

Henry B. Arthur has resumed his duties as economist with Swift and Company after having served as chief of the Office of Program Review and Recovery Progress in the Paris office of the Economic Cooperation Administration.

L. Jay Atkinson was appointed lecturer in economics for the winter term at George Washington University.

Mary Lee Bodwell has been appointed assistant professor of agricultural economics at Michigan State College.

Arend E. Boer has been promoted from associate professor to professor of commerce at the University of Pittsburgh.

Leon A. Bosch has been promoted to professor of business administration in the School of Commerce, Northwestern University.

M. Bronfenbrenner, of the University of Wisconsin, has been awarded a World Area Training Fellowship by the Social Science Research Council for study of postwar reconstruction in Japan and plans to spend the academic year 1949-50 engaged in field work in Japan.

Robert E. Carmody is an instructor in economics at Loyola University, Chicago, Illinois.

Charles F. Carson was appointed professorial lecturer in economics for the winter term at George Washington University.

D. R. Cawthorne was appointed head of the department of economics at Miami University, Oxford, Ohio, effective September, 1948.

Gabriel F. Cazell, formerly of American University, is now professor of economics at Kalamazoo College.

John M. Clark, of Columbia University, was awarded the degree of Doctor, *honoris causa*, by the University of Paris in November, 1948.

Richard M. Clewett has been appointed assistant professor of marketing in the School of Commerce, Northwestern University.

Erwin B. Cochran has been advanced in rank from assistant professor to associate professor of accounting at Baldwin-Wallace College.

Camille W. Cook has been appointed instructor in business law in the department of economics and business administration at the Alabama Polytechnic Institute.

Morris A. Copeland has resigned from the Board of Governors of the Federal Reserve System and returned to teaching at Cornell University as professor of economics.

Richard Donham has resumed teaching as professor of business administration in the School of Commerce, Northwestern University, after several years of business.

James S. Earley, professor of economics at the University of Wisconsin, has been granted leave of absence for the current semester.

Clarence W. Fackler, professor of accounting at the School of Commerce, Accounts and Finance, has been promoted to assistant dean of the Graduate School of Business Administration, New York University.

W. A. Flinn has been appointed instructor in economics in the School of Business Administration, Emory University.

Dascomb R. Forbush has been appointed assistant professor of business economics in the School of Commerce, Northwestern University.

Charles D. Forrest has been appointed assistant professor of advertising in the School of Commerce, Northwestern University.

Harold G. Fraine has resigned as assistant director of research for the Joint Committee on Investment Research of the American Life Convention and Life Insurance Association of America to accept a position as professor of commerce in the School of Commerce, University of Wisconsin.

Walter Froehlich has been promoted from associate professor to professor of economics in the College of Business Administration in the Graduate School, Marquette University.

Frank H. Gane has been promoted to associate professor of finance in the School of Commerce, Northwestern University.

Paul R. Gawthrop has been appointed instructor in economics in the department of economics and business administration, Marietta College.

Roy E. Geeting is now teaching in the department of economics, University of Tampa.

Milton Gilbert is on leave from the Department of Commerce to serve as director of the research and budget department of the American-Jewish Joint Distribution Committee in Paris.

Joseph M. Gillman is associate professor of economics and business administration, and head of the department of economics at Suffolk University.

Melvin L. Greenhut has joined the staff of the department of economics and business administration, Alabama Polytechnic Institute, as assistant professor of finance.

Gertrude Grodski has been appointed assistant professor of economics at Loyola University, Chicago.

Cyril Haas has been appointed lecturer in economics at the University of Miami.

Kenneth B. Haas has been appointed professor of marketing at Loyola University, Chicago.

William Haber has resumed teaching at the University of Michigan after a year's service as special adviser on displaced persons to General Lucius Clay.

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Jean C. Halterman has been appointed instructor in business organization and management in the College of Business Administration, University of Nebraska.

Abram L. Harris, of Howard University, has become associate professor of economics at the University of Chicago.

O. E. Heskin has returned to the University of Florida as head of the department of economics.

Hans Heymann has been appointed visiting professor of economics and foreign affairs at the University of Illinois for the current academic year.

Paul L. Howell has resigned from the School of Commerce, Northwestern University, to accept an associate professorship in finance at the School of Commerce, Accounts and Finance, New York University.

E. Jay Howenstine, formerly economist in the Office of Historian, UNRRA, has been appointed member of the economic section of the International Labour Office, Geneva.

H. J. Hudek, formerly of Iowa State College, has been appointed associate professor of economics at the Alabama Polytechnic Institute.

Holland Hunter has been appointed assistant professor of economics at Haverford College.

George B. Hurff has joined the staff of the University of Florida as research economist and associate professor in the bureau of economic and business research.

Leonid Hurwicz has returned to Iowa State College after spending a year with the Economic Commission for Europe of the United Nations, at Geneva, Switzerland.

Nathaniel Jackendoff, formerly of the University of Illinois, has been appointed assistant professor of economics at Washington and Jefferson College.

George Jaszi was appointed lecturer in economics for the winter term at George Washington University.

Eliot Jones, of Stanford University, is visiting professor of economics at the University of Washington during the spring quarter.

Jacob J. Kaplan has resigned from the Department of State to become a research associate, Institute of International Studies, Yale University.

Harold Kelso has been appointed professorial lecturer in business administration at George Washington University.

Willys R. Knight has been promoted to assistant professor of agricultural economics at Michigan State College.

Robert J. Lampman is assistant professor of economics at the University of Washington.

H. David Maloney has been appointed instructor in economics at DePauw University.

Daniel Marx has been granted a leave of absence from Dartmouth College to serve with the Economic Cooperation Administration in Paris.

C. Arnold Matthews has been appointed assistant professor of finance at the University of Florida.

Donald J. May is on leave from Emory University to continue his graduate work at the University of Chicago.

E. M. McCracken has recently been appointed controller of the University of Miami, Florida.

John B. McFerrin has been appointed head of the newly organized department of business organization and operation at the University of Florida.

Erskine W. McKinley, formerly of Birmingham-Southern College, has been appointed assistant professor of economics at the Alabama Polytechnic Institute.

Stewart Y. McMullen has been promoted to professor of accounting in the School of Commerce, Northwestern University.

Herman L. Meyers was appointed lecturer in economics for the winter term at George Washington University.

T. A. Mogilnitsky has been appointed chairman of the department of economics at Loyola University, Chicago.

Grady L. Mullennix has been appointed instructor in economics at the University of Texas for the current academic year.

Grover A. J. Noetzel, professor of economics at the University of Miami, Florida, has been appointed dean of the School of Business Administration.

Hugh Norton has been appointed instructor in economics at the University of Maryland.

Drakon B. Odom has been appointed instructor in accounting at the University of Florida.

Vincent A. Perry, formerly of New York University, has been appointed instructor in finance at Lehigh University.

J. Marvin Peterson has resigned from Miami University to accept a position with the Federal Reserve Bank of Minneapolis.

George S. Petras is an instructor in economics in the College of Business Administration of the University of Georgia.

Earl Phillips has joined the faculty of the School of Business Administration, Emory University, as instructor in business law.

Ronald M. Reifler has been appointed instructor in economics and statistics at Claremont Men's College.

Edward E. Rennhack has been appointed instructor in accounting in the School of Commerce, Northwestern University.

L. P. Rice has resumed his teaching at Dartmouth College after a semester's leave of absence.

Merrill J. Roberts has been appointed assistant professor of transportation and economics at the University of Florida.

Orville W. Roberts has been appointed professor of industrial management in the School of Commerce, Northwestern University.

Ned H. Scott has been promoted from teaching assistant to instructor in accounting at the University of Florida.

Stanley J. Seimer has been appointed instructor in industrial management in the School of Commerce, Northwestern University.

William B. Seiniger has been appointed lecturer in business organization in the School of Business Administration of the University of Buffalo.

Shou Shan Pu was a lecturer in economics at Michigan State College during the summer and fall quarters of 1948.

Louis Shere has been appointed professor of economics and director of tax research in the department of economics, Indiana University.

Emil G. Spitzer, of the International Monetary Fund, has been appointed lecturer in economics at the Catholic University of America.

John S. Spratt, on leave of absence from Southern Methodist University, has been appointed instructor in economics at the University of Texas for the current academic year.

Robert M. Strahl has resigned from the University of Nebraska to accept an appointment as associate professor of marketing at the University of Tennessee.

George W. Summerhill, formerly comptroller of Baylor University, has been appointed assistant professor of accounting at the University of Florida.

Robert P. Terrill has left his post as adviser on commercial policy in the Department of State to serve as deputy counselor of embassy, economic affairs, in Paris.

Carey C. Thompson is on leave from the University of Texas to pursue graduate work at the University of North Carolina.

E. T. Towne has retired from duty as a member of the faculty and as dean of the School of Commerce, University of North Dakota.

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Myron H. Umbreit has been promoted to professor of economics in the School of Commerce, Northwestern University.

R. Miller Upton has been promoted to assistant professor of finance in the School of Commerce, Northwestern University.

Edward T. P. Watson has been appointed assistant professor of business administration in the School of Commerce, Northwestern University.

Murray L. Weidenbaum has been appointed research economist in the Department of Labor of the State of New York.

Lawrence W. Witt has been promoted to professor of economics at Michigan State College.

John A. Wolfard has been appointed associate professor of economics at the University of Utah.

VACANCIES AND APPLICATIONS

The Association is glad to render service to applicants who wish to make known their availability for positions in the field of economics and to administrative officers of colleges and universities and to others who are seeking to fill vacancies.

The officers of the Association take no responsibility for making a selection among the applicants or following up the results. The Secretary's Office will merely afford a central point for clearing inquiries; and the *Review* will publish in this section brief descriptions of vacancies announced and of applications made. It is optional with those submitting such announcements to publish name and address or to use a key number.

Communications should be addressed to: The Secretary, American Economic Association, Northwestern University, Evanston, Illinois.

Vacancies

Money and credit, corporation finance, statistics: Wanted by an Eastern university, man with Ph.D. or doctoral requirements substantially completed, with specialization in these fields. Rank and salary dependent upon applicant's qualifications. P135

International economics, principles, statistics: Wanted, by a well-established Eastern men's liberal arts college, a teacher for international economics, principles, and statistics. To start in September, 1949. Opening is for instructor with salary range of \$2,600 to \$3,000 or for assistant professor from \$3,100 to \$3,700. Master's degree needed for instructorship. Doctorate or near doctorate plus some successful teaching experience for assistant professorship. P136

Economists Available for Positions

Economic principles, public finance, corporate control, banking, investments, and accounting: Man, married, 44, Ph.D., University of Missouri. Sixteen years of successful college teaching; business experience in banking and production work; lieutenant commander, U.S.N.R. Now chairman of social science division and professor of economics in medium-sized, state-supported college. Prefers straight teaching position but would consider combination of teaching-administration work; salary and rank commensurate with responsibilities of the job; prefers Middlewest or West Coast location. Available in September, 1949. E156

Theory, money, cycles, integrated courses: Man, 39, Ph.D. Thirteen years of broad teaching experience, including management courses and some history as well as economics; some experience as an administrator and as a research consultant. Published articles; book to be published soon. E180

Economic principles, labor economics, money and banking, public finance and economic history: Man, 34, married, completing doctoral dissertation. Government economist and teaching experience in courses listed; now head of department in Eastern college. E214

History of economic thought, labor economics, marketing, principles of economics, world trade, industrial management: Man, 30, married, Litt.M. in Economics, working toward Ph.D. Three years of teaching subjects listed above in small Midwestern college; now head of school of business administration, rank of associate professor. Available in September, 1949. E225

Labor (economics, problems, law), economic theory, American economic history, business cycles, statistics: Man, 28, married, M.A., now working on Ph.D. dissertation at Columbia University. One year teaching at major college in New York; 3 years of executive experience in government industrial relations research and labor disputes settlement; 2 years of government administration and research in war materials procurement; sometime assistant in economics at leading university; research aide in labor relations for national business magazine. Available in June, 1949. E232

Economics and business administration: Man, 45, M.A., near Ph.D. Major field marketing but has taught a wide range of economic and business subjects; 17 years of college and university teaching, much of this time as head of departments of

